AIR TRANSPORTATION

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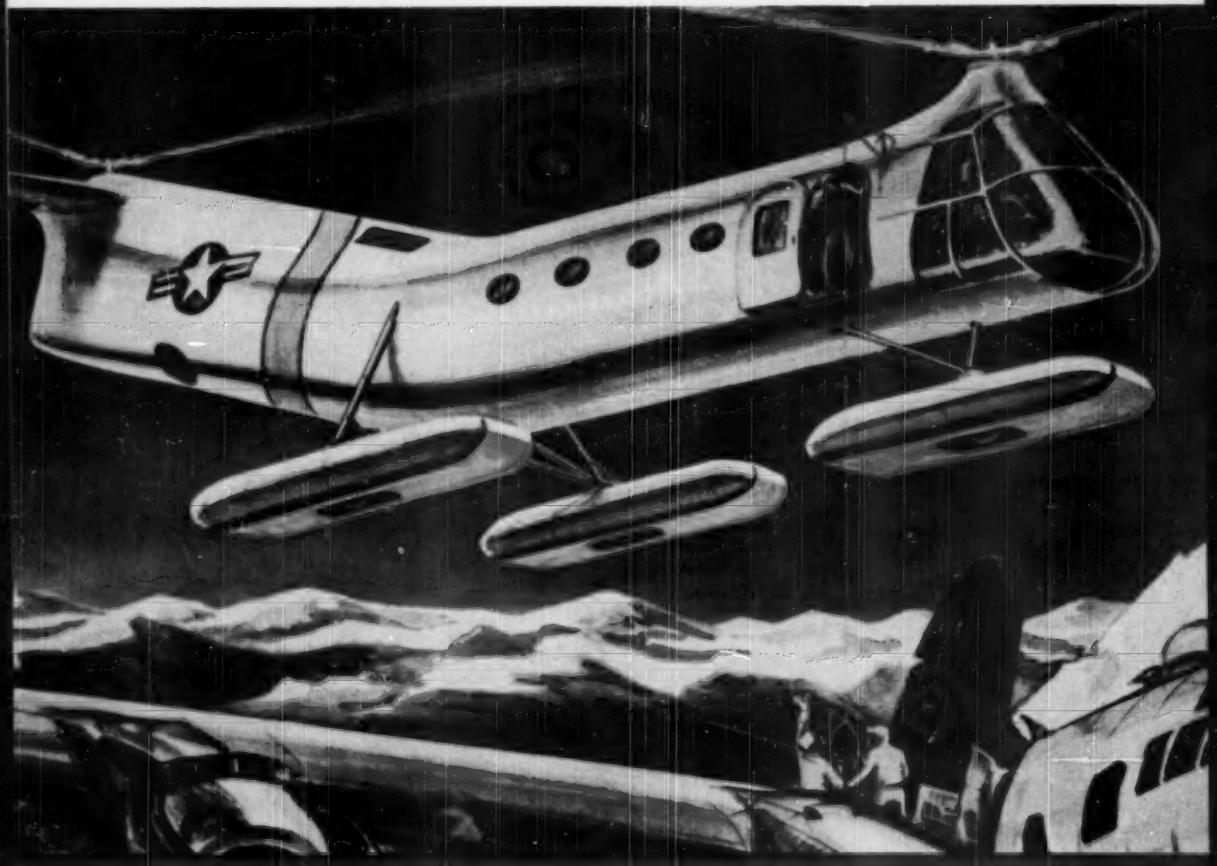

FEATURED IN THIS ISSUE

GEARING GROUND TRANSPORTATION TO AIR CARGO

BOOM IN BLOOMS

THERE'S MORE TO AIRBORNE CONTAINERS THAN MEETS THE EYE

★ SPEED IS NOT THE ONLY THING AIR FREIGHT SELLS ★

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TRANSPORT TIDINGS

BOB PRESCOTT, president of the Flying Tigers, reports a net profit of $608,000, after taxes, for the first quarter of the 1950-51 fiscal year. That's a new record for the company, helped out by the carrier's part in the Pacific airlift. Prescott, who addressed the California Manufacturers Association recently, predicted that the air freight volume in the next five years has a potential growth "eight times the present movement."

Pan Am recently inaugurated double-decker service between New York and Beirut, Lebanon, with only one stop at London. The new flight cuts 9½ hours off the previous elapsed flight time. For shippers that's a saving of a whole business day.

Remember that 200,000-pound furniture lift from Miami to San Juan last year? Another one has started to Varadero Beach, Cuba. Consignee is the Hotel Veradero Internacional. It is expected that about the same weight of furnishings and equipment will be flown, filling some 18 to 20 Pan Am aircraft.

Just learned that Pan Am recently hauled six tons of soft drink vending machines, from Miami to Caracas. Coca Cola Bottling Company was on the receiving end. Also that 120 domesticated mink were flown from Miami to Buenos Aires. Value: $14,000.

Talking about mink, Panagra tells us that Fritz Ferger, an importer, recently was the innocent indirect cause of some confusion over a shipment of chinchillas from Antofagasta, Chile, to San Francisco. Seems that the number of chinchillas didn't square with the total on the manifest. When the smoke of argument blew away, it was discovered that a brand new chinchilla had been born enroute. Addendum: Panagra reports that nearly a half-million dollars in chinchillas have been airfreighted from Chile to the United States this year. Each pair's worth $1,500.

Sir Miles Thomas, BOAC's chairman, states that the month of August showed up as the first month the airline has made money on all its transatlantic routes. Net profit for the month was $16,800. Future looks good, too.

If you're shipping to Berlin, you ought to know that Air France now is operating five flights a week between Paris and Berlin, making direct connections at Orly Airport with the runs from New York, Boston, and Montreal. Tuesday, Friday and Sunday flights are via Frankfurt; Monday and Thursday flights, via Munich.

Rex Brack, general traffic-sales manager of Braniff International Airways, that an on-the-spot visit to Buenos Aires has allowed a team of Braniff officials to "come home with a far brighter picture of the future of Argentine-United States trade than

(Concluded on Page 14)

AIR TRANSPORTATION

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AIR TRANSPORTATION, published once each month, thoroughly covers the entire air cargo industry for the benefit of all those engaged in shipping and handling domestic and international air freight, air express, and air parcel post, as well as using the domestic and international air mail services. Included in AIR TRANSPORTATION'S wide coverage are: air shipping, cargoplane development, rates, packaging, materials handling, documentation, air cargo terminal development, insurance, routing, interline procedures, new equipment, commercial airlines, military air transport service, air freight forwarders, personnel.

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COVER

Piasecki's H-21 helicopter shown operating in an Arctic area—a forecast of the all-cargo helicopter yet to come.

Speed is Not the Only Thing Air Freight Sells

By THOMAS L. GRACE

President

Slick Airways

AIR FREIGHT TRANSPORTATION is like any other form of transportation in that all we have to sell a shipper is service—service that will suit his needs and enable him to effect economies in his business. I feel, however, that the service offered by air freight is unique and different from that ever offered by any other form of transportation.

Most people who are not too familiar with this comparatively new industry naturally assume that the only differences between surface and air transportation are that air is faster and much more expensive. This latter concept is a carryover from the days when the only property that could be shipped by air was via air express at rates five times higher than air freight rates and was carried on luxury liners.

The air freight salesman doesn't approach a shipper unless he feels that he can effect savings for that shipper that will more than offset the small rate differential. Speed is, of course, the basic advantage of air freight service over surface transportation, and it is through speed that many of the economies can be realized. However, air freight carriers render several other services that have proved invaluable to the shipping public and have undoubtedly contributed to the phenomenal growth experienced in the industry.

For example, there is the flexibility of service that came into being with the concept of area-to-area certification. Freight movement does not necessarily follow the pattern of population distribution. This is especially true in the case of perishables where the principal producing centers are often sparsely settled. Also, seasonal fluctuations, not only in perishable production, but in buying and manufacturing, often cause the volume of freight movement to shift from one point to another. Under the area-to-area theory planes can originate and terminate at points where the need arises. This one-carrier service from farm to market eliminates transloading and extra handling, thereby minimizing the exposure to loss and damage.

This type of operation results in higher load factors and more efficient operation of the airline. Higher load factors and efficient operation mean lower costs, and lower costs mean lower rates.

Probably the most unique feature that air freight has introduced to the shipper is the Advance, In-Flight Manifest. This involves the leased-wire teletype connecting all of the carrier's stations. This manifest is sent out each time a flight leaves a city, regardless of whether it is an originating or enroute point, and gives complete information about the flight. It lists the consignor, consignee, commodity, weight, and number of pieces in each shipment on board. For the carrier, such operational data as plane number, gross weight, crew, gas load, etc., is listed as are special handling instructions for certain shipments.

The advantages of the Advance, In-Flight Manifest are readily seen. The consignee, who is expecting freight from a manufacturer but doesn't know when, can call his air freight carrier and ask when it will arrive. The carrier's agent checks the advance manifests on flights originating or passing through the manufacturer's city, and in a few seconds can tell him whether the freight has been turned over for transport and, if it has, when the consignee can expect it on his receiving dock. This enables the retailer to plan special sales on definite information and allows him to start his advertising campaign with the assurance that the merchandise will be there and available as advertised.

The manufacturer also benefits by this type of service. He can schedule his work by knowing just when he will receive certain parts. This is especially true in connection with critical items which cause shut-downs.

In connection with freight requiring special handling, it is not uncommon to see, on the teletyped report, the notation *"Dog in Compartment 1, fed watered and walked in SFO, 2100 CST."* *"Perishables in Compartments A & B, keep cabin temperature 35 to 40 degrees,"* or the

(Concluded on Page 27)

What has been accomplished—and what can be done in the future—by the packaging industry in the effort to bring air cargo to its maximum level? Here's why . . .

SPECIALLY PACKAGED FLOWERS are mechanically conveyed into a Western Air Lines plane.

There's More to an Airborne Container Than Meets the Eye

By M. R. BARUH

Manager, Sales Promotion Dept.

Fibreboard Products, Inc.

WHAT has been done and what is left to be done by the packaging industry to aid in the maximum development of the air cargo industry?

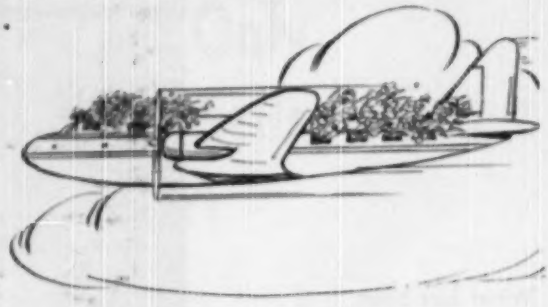
We, as boxboard manufacturers, are convinced from our contact with packaging for air cargo and the experience reports of the air cargo carriers that our product is ideally suited for use in packaging the majority of items shipped by air. Wooden cases are being used only to package items of high specific weight or where extreme susceptibility due to pressure damage exists, such as on shipments of electrical or electronic equipment and machinery. While other materials are used to a limited degree, paperboard containers make up the large percentage of the containers used for air shipment. Therefore, this article is confined to a discussion on how the paperboard industry has helped and can help in the ultimate development of the air cargo industry, is in its infancy at this time compared to its potential possibilities.

Our company has been making packages for air shipment for several years, some of which were specifically designed for air shipment while others, not so intended, were undoubtedly used in the transport of cargo by air. We have been vitally interested in fostering the use of paper packages for specific commodities and methods of handling, and have participated in meetings such as this, test shipments, etc., since the inception of freight movements by air.

A brief look at the picture over these years will be helpful, both for the light it throws on the present status of our development and for the indications it gives us of what we can expect in the future. It is interesting to note what

(Continued on Page 37)

California's $50,000,000-a-year flower industry is well aware of the values of air transportation, and is one of the air carriers' best customers. With existing problems to be ironed out in the near future, there is every likelihood of an even greater . . .



BOOM In BLOOMS

By WILLIAM R. LEE

President, Lee Brothers Wholesale Flower Shippers

Vice President, Northern California Flower Shippers' Association

THIS bloomin' business began in the early days of California when a few enterprising young men earned a livelihood by selling flowers on the streets of San Francisco. These pioneers of floriculture — men with "green thumbs" stained from cultivating the beauties of nature—never dreamed that some day the seeds they planted would bloom into a multi-million dollar business. But, blessed by nature with rich fertile soil, sunshine, and climate ideally suited to growing flowers, the Bay Area was destined to become the floral center of the nation.

This was the forerunner of an industry which grew and prospered until the fame of California flowers soon became known throughout the country. In 1915, the first attempt was made to ship these colorful products to distant cities. The chrysanthemum, transplanted from the Orient, which grew to matchless perfection in our soil and climate, was chosen, because of its magnificence, as the first flower to be shipped to New Orleans for the All Saints' Day observance that year. The first carload, shipped without refrigeration, met with astounding success. When the news reached other cities throughout the country the immediate popularity of California flowers created a demand that was unbelievable. Thus, was born a new phase of the floral business which today ranks as one of our major agricultural industries.

From this very modest beginning, the floral shipping business rapidly expanded. With improvements in rail facilities and refrigerated express cars it soon became possible to ship not only chrysanthemums but also other types of flowers that grew luxuriantly in the invigorating climate. The amazing growth of the floral industry continued until it is now considered a vital part of the economy of California, employing thousands of men and women in various branches of the industry. Estimated sales of $25,000,000 annually graphically illustrate the magnitude of the floral industry in the Bay Area. This, plus the fact that Southern California produces equally much, makes an estimated total of $50,000,000 for the entire state. At the present time approximately 40% of the flowers produced are sold for local consumption and 60% are shipped out of the state.

The tremendous demand of the Eastern markets and the delicate nature and fragility of flowers required the fastest and most efficient method of shipment. The advent of shipping by air brought a new medium of transportation and a new conception of flower shipping to those engaged in supplying their products to the Eastern market. The speed with which flowers could be transported by air offered many advantages over the slower method of rail transportation. At first, because of the extremely high cost of air express, only lightweight products of high value, such as gardenias and orchids, were shipped in small quantities. The success of these experiments proved this method to be practical and these highly perishable items, heretofore sold only locally, soon found their way into markets in every city. With the knowledge gained from airlifts during World War II, veteran pilots organized lower-rate air cargo lines and, so, air freight became of age during the postwar period. Today every type of flower grown in California is air-

(Continued on Page 20)

PROBLEMS and ADVANCES in . . .

Gearing Ground Transportation To Air Cargo

By JOHN C. SUTHERLAND • Assistant Sales Manager, Haslett Warehouse Company

NORTHWEST AIRLINES TRUCK, equipped with hydraulic hoist, transfers cargo to plane.

LEDERLE LABORATORIES STATION WAGON rushed this consignment of drugs to Idlewild where it was turned over to KLM for delivery to epidemic-ridden Khartoum.

Two Factors influence the shipper to exercise his choice of the type of carrier for forwarding, and these are cost and service. I mention cost first because if the shipper cannot pay the cost, the service will not be used. The airlines have secured from other methods of transportation—rail and the highway motor carrier—certain traffic which could bear a higher cost for transportation. The airlines have also brought additional sales to territories and created new markets for goods, thus providing that fundamental requirement of all carriers—the development of an increasing flow of commerce between these United States and foreign countries. But without adequate ground transportation the foregoing would not have been possible.

Air freight is an outgrowth of air express. The latter service began in 1926 to serve a need for more rapid transport of valuable papers, advertising matter, news, photos, film negatives, and plane, auto and machine parts. The first ground transportation—believe it or not!—was rendered by Postal Telegraph. Postal telegraph service from and to airports in the early days was adequate for the American businessman's real requirements for service, with cost a secondary item. The postal telegraph's average shipment weighed 8.23 pounds as against the present average air freight shipment of 110 pounds. In 1936 the heaviest shipment was one piece of machinery weighing 1,820 pounds. This coup of the airlines naturally created considerable publicity.

Since early days ground transportation has been essential in meeting the air freight challenge and its factors of cost and service. In the foreseeable future we find no substitute for the early and present-day coupling of surface and air transport to permit air freight to move and broaden its usefulness in expediting foreign and domestic trade. The present ever-growing volume of air freight tonnage is a tribute to the beginning conquest of the high cost of service by the airlines.

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United States Overseas Air Cargo Services

By N. W. KENDALL

Transportation Division
Office of Domestic Commerce
United States Department
of Commerce

PART IX

AS OF MARCH 14, 1949, approximately 215 points outside of continental United States were certificated for air transportation service, compared with some 758 points within the continental United States. Table 25 presents an over-all summary of the number of points certificated for United States overseas air cargo services; the number being served by the 15 carriers shown on the accompanying map as of March 15, 1949; the number not being served; and the route mileages certificated as of March 1, 1949.

Table 25 discloses that, as of March 15, 1949, United States certificated carriers engaged in United States overseas air cargo transport were authorized to serve a total of 249 points, of which 169 were receiving service and at 80 of which service had not been initiated or had been temporarily suspended. Of the 169 points being served, 29 were in continental United States, 12 were in United States territories or possessions, and 128 were in foreign countries (with the exception of the special cases of Okinawa and Canton Island). Five of the 80 points not being served were located within continental United States, one in a United States possession, and the remainder in foreign countries. Thus, the break-down of the total points authorized was as follows: Continental United States, 34; United States territories or possessions, 13; and outside United States, 202.

While air service was authorized to only 215 points outside of continental United States as of March 15, 1949, compared with some 758 points certificated within continental United States for domestic operations, the route mileage shown in table 25—180,951, including a relatively small amount of duplication—was approximately 30 per cent greater than that certificated to United States carriers for service within continental United States.

Another comparison between domestic and overseas air services may be made in terms of aircraft operated in scheduled service. Table 26 summarizes the number of United States aircraft in scheduled operation as of the end of April, 1949, as reported by the Civil Aeronautics Administration.

Finally, attention should be redirected to the fact that as of March 15, 1949, scheduled United States-flag air cargo service was available to a total of only 140 points outside continental United States. While that number probably includes the overseas traffic-receiving and traffic-generating points which are of major importance at the present time, it is obvious that direct scheduled service by United States certificated carriers is unavailable to many overseas points which currently export or import little or no cargo by air but which might be potentially significant air cargo markets. The international air route pattern, evolved during the late war and early pre-war periods when a relatively small amount of commercial cargo was flown, is based largely upon passenger traffic demand and requirements for mail service. Even at the present time, the bulk of the scheduled air service available to shippers and receivers consists of combination flights on which mail and passengers have priority of movement over cargo. As shown in table 24, only four of the United States certificated carriers offer scheduled all-property services to and from points outside continental United States; and the total of such services amounts to only 26 round trips per week, counting one-way all-property flights as one-half round trip each. Nonscheduled all-cargo services are of course available over some of the certificated lines.

(2) Volume and Distribution of Traffic

a. Volume of traffic

Table 27 summarizes, by carrier, the revenue ton-miles of scheduled express and/or freight service rendered by "international and overseas American flag carriers" during each quarter of the years 1946 through 1948.

According to table 27, the volume of scheduled United States overseas air cargo service performed by the 13 car-

(Continued on Page 33)

TABLE 24.—Scheduled All-Property Flights in U. S. Overseas Air Cargo Service, Mar. 1, 1949

Carrier	Scheduled Route[1]	Round Trips per Week	Equipment Used
U. S. certificated carriers:[2]			
National Air Lines	Miami–Havana	5	C-46
Pan American Airways	San Francisco–Honolulu–Midway–Wake–Guam–Manila	1	DC-4
Do	Seattle–Fairbanks	4	DC-4
Do	New York–Gander–Shannon–London–Brussels	1	DC-4
Do	New York–Gander–Shannon–London–Brussels–Istanbul–Damascus–Basra	1	DC-4
Do	Miami–Ciudad Trujillo–Caracas	5[3]	D-46
Do	New York–San Juan–Belem–Rio de Janeiro–Montevideo–Buenos Aires	1	DC-4
Do	New York–San Juan–Caracas–Port of Spain–Belem–Rio de Janeiro–Montevideo–Buenos Aires	1	DC-4
Do	Miami–Havana	7[3]	C-46
Do	Miami–Barranquilla	5[3]	C-46
Do	Barranquilla–Balboa	1[3]	C-46
Do	Houston–Mexico City	3[3]	C-46
Do	New Orleans–Guatemala City	3[3]	C-46
Do	Mexico City–Guatemala City–Balboa	1[3]	C-46
Pan American-Grace Airways	Balboa–Guayaquil–Lima–Santiago–Buenos Aires	1	DC-4
Trans World Airline	New York–Gander–Shannon–Paris–Geneva–Rome–Athens–Cairo–Basra–Dhahran	1	DC-4
Foreign scheduled carrier:			
Expreso Aereo Interamericano, S. A.	Havana–Miami	7	C-46 and C-47

[1] Cities which are flag stops on flights in either direction or are served only on flights in one direction are omitted.
[2] National—"cargo express and mail only"; Pan American and Panagra—all flights are "cargo and mail only," except those with C-46 equipment and the two New York–Buenos Aires round trip flights which are "cargo only"; TWA and Expreso-cargo.
[3] Indicates one-way trips.

A MERRY XMAS

AIR COMMERCE

HAPPY NEW YEAR

(REG. U. S. PAT. OFF.)

VOL. 17 DECEMBER, 1950 NO. 6

NEW TWA AIR CARGO SERVICE

3 Organizations Jointly Sponsor An Air Cargo Day

NEW YORK—The American Society of Mechanical Engineers, the Institute of Aeronautical Sciences, and the Society of Automotive Engineers joined forces on November 28 to sponsor a second Air Cargo Day as part of the 1950 annual meeting of the ASME. The first such day was observed last year.

Chairmen of the two technical sessions were Rear Admiral L. B. Richardson, USN (retired), director of research and development for the Fairchild Engine and Airplane Corporation; and Charles Froesch, chief engineer of Eastern Air Lines.

Participating as Air Cargo Day speakers

(Concluded on Page 13)

Transcontinental Flights Of All-Cargo DC-4s Inaugurated

NEW YORK—For the first time anywhere, a transportation service has inaugurated scheduled one-carrier all-cargo runs between the West Coast and cities in Europe. Linking cities on its coast-to-coast domestic system, TWA is providing this one-carrier service to such important European cities as Paris, Rome, Milan, Geneva, and Zurich.

TWA's new overnight all-cargo run between major United States cities, which began November 1, utilizes DC-4 airfreighters capable of a 19,000-pound payload. The inaugural flight from New York to Los Angeles hauled a total of 14,271 pounds, consisting of 10,840 pounds of freight, 3,210 pounds of express, and 221 pounds of mail. Some of the cargo offloaded at Los Angeles was transshipped to San Francisco by TWA's shuttle plane operating between the two California cities. Interim stops were at Philadelphia, Chicago, and Kansas City.

Wearing apparel of all types formed the bulk of the payload. The largest single shipment was consigned to Morris B. Sachs, Chicago. Another heavy commodity was processed film distributed by Universal, Paramount, RKO, Twentieth Century-Fox, Pathe, and Warner. Aboard the plane were shipments by Western Electric, General Ceramics, and Lockheed Aircraft.

Freight forwarders generating shipments for the flight included Emery Air Freight, Fast Freight Shipping Service, Midtown Air Freight, Metropolitan Air Freight, and Air Freight Haulage.

According to S. E. Rust, manager of cargo sales for the airline, TWA will be able to handle approximately three times the volume previously flown on the transcontinental service. All-cargo flights over

(Concluded on Page 12)

LAV to Get 202s

CARACAS—Lineas Aeropostal Venezolana soon will have Martin 202 transports operating nonstop between Caracas and Barbados.

COOPERATION IS THE WORD

All for one and one for all—in essence, that's the theme of this picture. Above are four important cargo officials—(left to right) Emory F. Johnson, secretary-general manager, Air Cargo Institute; Geoffry Pett, cargo superintendent, British European Airways and chairman of IATA's special committee on uniform cargo procedures; Paul W. Pate, cargo sales manager, Delta Air Lines, and retiring chairman of the ACI Industry Advisory Board; and Joseph D. Boylan, American Airlines' director of cargo sales and Pate's successor—who attended the recent meeting in New York of the ACI Industry Advisory Board. They pledged cooperation in the task of ironing out various air cargo problems.

SAS Adds All-Cargo Runs To Its Regular Services

NEW YORK—Scandinavian Airlines System is now offering a weekly all-cargo service to the United Kingdom, Germany, and Scandinavia, in addition to its regularly scheduled passenger-cargo flights.

According to Harold Gylleneward, general traffic manager, the all-cargo service has been set up to take care of the heavy accumulation of weekend freight. Departing from Idlewild every Saturday, all shipments are delivered in Europe the following Monday.

Air France, Pan Am, Slick Swell Fleets With Bigger Transports

Purchases of giant Boeing, Lockheed, and Douglas aircraft have been reported within the last few weeks, with deliveries promised for the near future. These will add shipping space to the international combination-plane fleets of Air France and Pan American World Airways and the domestic all-cargo fleet of Slick Airways.

Air France, which now operates 19 *Constellations*, has ordered four more, representing the French national airline's seventh reorder for this type of aircraft. The contract was signed at Burbank by the airline's chairman of the board, Max Hymans, who was accompanied to the West Coast by Henri J. Lesieur, general manager of the North American and Caribbean Division.

Pan Am's acquisition of the prototype *Stratocruiser*, the first of the 57 built for United States and foreign air carriers, has brought the airline's *Stratocruiser* fleet to 29. When it took over the assets of American Overseas Airlines several months ago, Pan Am acquired eight of its Boeing double-deckers.

Of particular note is Slick's purchase of three DC-6A *Liftmasters*, which was jointly announced by Thomas E. Grace, the air freight carrier's new president; and Nat Puschall, vice president-commercial sales for Douglas Aircraft. Slick is the first airline in the world to purchase this 300-mile-an-hour cargoplane. According to Grace, purchase of the *Liftmasters* will increase the airline's present traffic potential by about 60%. He said that with the DC-6A "we will be able to provide overnight delivery of cargo anywhere in the United States."

MATS Disbands Its Airlift Task Force

WASHINGTON, D. C.—The West Coast Airlift Task Force (Provisional), headed by Brigadier General Henry C. Kristoffersen and staffed by transport and traffic personnel of the Military Air Transport Service, has been disbanded. Although the Chinese have actively entered the fight in behalf of the North Koreans, there was no word at presstime whether the task force would be reactivated.

Organized August 24, the task force had the "dual responsibility of integrating civil contract air carriers and United Nations planes into the MATS Pacific Airlift and controlling traffic and cargo movement to Japan to insure rapid and orderly delivery of high-priority cargo." Headquarters was at Fairfield-Suisun Air Force Base, California.

New El Al Office

New and permanent quarters have been established by El Al Israel National Airlines at 27-29 West 57th Street, New York, according to an announcement made by Major Yehuda Koppel. Operating non-scheduled flights from New York to Lydda during the past Summer, El Al expects to inaugurate scheduled operations in the near future. From Israel, the airline flies on regular schedules to Rome, Teheran, Johannesburg, Istanbul, Zurich, Vienna, Paris, and London.

New York Area Seen Getting Scheduled Helicopter Service

WASHINGTON, D. C.—A recommendation by CAB Examiner Ferdinand D. Moran has brought nearer scheduled helicopter service for the metropolitan New York area. New York Airways, given the nod by Moran for a five-year certificate, would link the New York General Post Office with La Guardia, Idlewild, and Newark Airports.

The examiner proposed that New York Airways be certificated to operate the following routes:

La Guardia, to and from: Mount Vernon, New Rochelle, Scarsdale, White Plains, Greenwich, Stamford, South Norwalk (the latter three in Connecticut), Pleasantville, Tarrytown, and Yonkers.

La Guardia, to and from: States Island, Far Rockaway, Long Beach, Rockville Centre, Freeport, Garden City, Hicksville, and Great Neck.

Newark, to and from: Plainfield, New Brunswick, Princeton, Asbury Park, Long Branch, Red Bank, and Perth Amboy—all in New Jersey.

Newark, to and from: North Bergen, Englewood, Hackensack, Rutherford, Passaic, Clifton, Paterson, Morristown, and Summit—also New Jersey points.

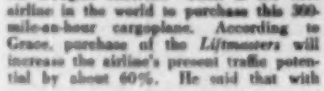
Recommended to perform a passenger and mail service, the helicopter transportation company also was proposed to carry property to any point within 50 miles of La Guardia and Newark Airports.

President of New York Airways is John L. Senior, Jr. Among the directors are William A. M. Burden, former Assistant Secretary of Commerce; and Rear Admiral Luis de Florez, former Deputy Chief of Naval Research.

New TWA Cargo Service

(*Continued from Page 11*)

the North Atlantic turn around at Rome, but shipments consigned to points east of the Italian capital are forwarded aboard the airline's DC-4 and *Constellation* passenger flights. TWA's all-cargo runs between New York and Rome touch at Gander, Shannon, Paris, Zurich, Geneva, and Milan.



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AIR FREIGHT FORWARDERS

ACME AIR CARGO: Headed by George H. Ropes as president and Eric Rath, executive vice president, this affiliate of Acme Fast Freight, Inc., has made its bow. At the present time it is concentrating on transatlantic forwarding by air, with service offered to points in Europe, Africa, and Asia. It was announced at a press conference held in New York that eventually AAC will expand its operations to "other parts of the world, including Latin America."

Officers of the new firm pointed out that AAC will use the 152 offices in the United States operated by the parent company, and will have distribution facilities in more than a hundred overseas cities. (It also operates nine offices in Mexico, two in Cuba, and two in Canada.) An international terminal has been established at Pier 42, East River, New York, near Heliport No. 1.

One important feature of AAC's operations is the introduction of a new-type airwaybill. Simplified, it is valid for shipments from origin to destination. It has made available commercial air transportation's first negotiable airwaybill, which is acceptable at a bank. Acme will do no documentation work; it is offering an expedited air freight forwarding service, taking advantage of its CAB authority to consolidate export air shipments. Officials emphasized that AAC "will not compete with foreign freight forwarders nor with shipping agents." In fact, according to reports, AAC has been contacting various foreign freight forwarding concerns with an eye towards becoming the "forwarders' forwarder."

With respect to forwarders, it was stated that there will be no necessity for the latter to copy the shipper's document. The forwarder need only finalize the paper. Also, as an agent of AAC, the forwarder will have no cash reports to make out. A weekly statement will be turned over to him.

Rate breaks are at 1-22 pounds, 23-99 pounds, and 100 pounds and over.

Acme stated that it will establish a detailed control system which will make available full information concerning the movement of traffic from points of origin to destinations within five days of request.

Peter A. Bernacki: H. Erik Olsen has been named general traffic manager of the Philadelphia division. He formerly served as traffic manager of an exporting firm in that city.

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NWA Serves Seoul Again

ST. PAUL—Its service to Seoul cut short by the sudden invasion of South Korea last Summer, Northwest Airlines has resumed flights there as a result of the United Nations victories. Weekly flights are operated to the Korean capital at the present time, but these are expected to be increased to two-a-week in the near future. NWA has been serving Seoul since July 15, 1947.

New TACA Service

NEW ORLEANS—Nonstop service to Belize, and continuing to San Salvador with direct connections for Managua, has been inaugurated by TACA International Airways. This is in addition to the daily nonstop New Orleans-Guatemala City-San Salvador run.

Iberia to Operate DC-4s To Miami and San Juan

A foreign air carrier permit has been issued by the Civil Aeronautics Board to Iberia Compania Mercantil Anonima de Lineas Aereas, for the transportation of passengers, freight, and mail from points in Spain to San Juan via Caracas; and from Spain to Ciudad Trujillo, via Miami and Havana. Iberia will operate DC-4 transports.

The Spanish airline has been serving cities in Europe and South America for two decades.

Air Cargo Day

(Continued from Page 11)

were Lieutenant Colonel Lucian S. Rochte, chief of the Cargo Branch, Engineering Division, United States Air Force, Wright-Patterson Air Force Base; George E. Hagemann, engineering editor, Ronald Press; Jervis B. Webb, treasurer and general manager, Jervis B. Webb Company; Alan F. Kahey, project engineer, Boeing Airplane Company; Jackson R. McGowen, project engineer, Douglas Aircraft Company; and Sol S. Kreisler, preliminary design specialist, Douglas Aircraft Company.

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LOCKHEED SUPER CONSTELLATION

The familiar Constellation is dwarfed by its giant sister, the Super Constellation, described by Lockheed Aircraft as "a new airliner designed to bridge the gap between modern planes and the first American jet transport." According to company engineers, the Wright engines mounted on the bigger plane will keep it "ahead of all competitive aircraft on transcontinental and transatlantic runs," and when dependable turbo-prop power bows in, it will achieve "the final link with America's first pure jet transport." Longer than the regular Constellation by 18.4 feet, it stretches to 113 feet, seven inches, and is pressurized up to 30,000 feet. Leonard K. Schwartz, Lockheed executive, asserted that it is the first truly nonstop transatlantic transport ever built. It is claimed that the Super Constellation will be about 90 miles an hour faster than the fastest American-built commercial transport in the air today. Two airlines are reported to have given Lockheed orders totaling $60,000,000 for the new plane. You'll be seeing the Super on the airways pretty soon.

Pan Am Improves Its Latin American Runs

Aimed at providing faster flights and more frequent service to points in Latin America, Pan American World Airways has announced a drastic revision of its schedules.

Included in the changes are (1) a third weekly *Stratocruiser* flight between New York and Buenos Aires; (2) four-a-week nonstop *Constellation* service between New York and Caracas; (3) three flights a week between New York and Sao Paulo, via San Juan, Curacao, Caracas, Belem, and Rio de Janeiro; (4) one-stop service—at Port-au-Prince—between Miami and Caracas; and (5) the assignment of DC-4s to Central American routes.

Costa Rican Air Carrier Will Operate to Miami

WASHINGTON, D. C.—Lineas Aereas Costarricenses, Costa Rica airline, 40% of whose stock is owned by Pan American World Airways, has won a foreign air carrier permit from the Civil Aeronautics Board. It will operate between San Jose, Costa Rica, and Miami, with an interim stop at Caberas, Nicaragua.

LAC expects to operate two flights a week on which cargo would be carried, plus "as many all-cargo flights as are required by the traffic." The Board revealed that 75% of the carrier's assets are indebted to Pan Am.

City Cargo Terminal Is Opened in the Capital

WASHINGTON, D. C.—The scheduled airlines have opened an air cargo terminal at 1026 17th Street, N. W., "to meet the increased needs of the growing volume of air cargo in the Washington area." It is now possible for shippers to deliver their cargo to the downtown location for shipment to all domestic and international points. Tariff quotations of all domestic and international air carriers, export-import data, flight schedules, and other freight and express information are available at the terminal.

Transport Tidings

(Continued from Page 4)

certain statistics had led us to believe before our visit." Problems in transportation, communication, and documentation have been worked out "with clients on both ends of our international routes."

Next month Canadian Pacific Airlines will inaugurate a direct weekly service between Vancouver and Honolulu. At the present time, this service is on a fortnightly basis, with Fiji and Australia on the route. There will be no increase in service to the latter two points.

Sabena reports that its first DC-4 operating with MATS has been replaced by a fourth plane. It's returning to Brussels for overhaul, and may return to the Far East later.

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*Between Miami and Balboa/Panama, over the routes of Pan American World Airways.

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Pan American Grace Airways, Inc.

Air Traffic Conference: The following officers have been elected to serve next year: president, Walter Sternberg, vice president-sales, National Airlines; first vice president, James W. Austin, vice president-traffic and sales, Capital Airlines; and second vice president, Harding Lawrence, vice president-traffic, Pioneer Air Lines.

American Airlines: David C. Frailey has been appointed New England regional director of public relations.

Civil Aeronautics Board: James M. Verner has taken over the post of executive assistant to Delos W. Rentzel, new chairman of the board.

Colonial Airlines: William V. McTaggart recently moved to Washington where he is serving in his new post as regional sales manager . . . Carl Roethgen, formerly with American, is now heading cargo sales with headquarters in New York.

Emery Air Freight: James McAdam has been appointed director of advertising. Prior to this position he managed Emery's Pittsburgh office for more than three years . . . O. Sanford Boyd, Jr., has been elevated to the position of comptroller . . . Frank B. Ward moves up to manager of rates and tariffs.

Flying Tiger Line: Milton C. Montgomery has succeeded Albert J. Jansen as director of traffic, the latter returning to his duties as assistant to the president . . . F. E. Hembree is now operating as superintendent of stations . . . Robert Burke recently was named district sales manager at Philadelphia . . . New personnel director is Arthur H. Meyer.

IATA: Stephane Thouvenot, Deputy Secretary General of Civil Aviation in France, appointed Deputy Director General of IATA . . . Rudolph Feick, formerly an enforcement officer for the North Atlantic Steamship Conference, named Chief Enforcement Officer for the airline organization.

Italian Airlines: Joseph Jordan has been appointed director of public relations. He has a newspaper and radio background.

KLM: Charles L. Buhrman is now serving the Michigan-Indiana-Kentucky-Ohio area as regional traffic representative. Headquarters are in Detroit.

Mid-Continent Airlines: James D. Browner, ex-Trans-Canada, now with MCA as district traffic-sales manager in Chicago.

National Airlines: Willis C. Baker has been promoted to general traffic manager. He has been with NAL six years.

Northwest Airlines: Robert J. Morgan currently working as European sales director . . . J. P. Farrell now acting sales manager in the Orient . . . Thomas W. Marshall appointed district sales manager in Seattle . . . Three more promotions: T. S. Zawasky, to district sales manager in Rochester; Morley F. Emerson, to district sales manager in Milwaukee; and J. Quinn Collins, to assistant district sales manager in Chicago . . . Lester Powers, new representative in New York's financial district . . . Floyd Oliver, now handling publicity and public relations in Seattle.

Pan American World Airways: Recently named officials of the newly created Western Atlantic Region, Atlantic Division: Stanley E. True, director; Walton H. Jones, traffic and sales manager; Charles S. Vaughn, operations manager . . . Melville E. Stone, former sales promotion manager, has moved into the position of advertising manager.

Pioneer Air Lines: Marvin L. Davis, promoted to general traffic and sales manager . . . Lewis M. Zafran, now serving as Davis' assistant . . . W. W. Spradley, new regional traffic and sales manager . . . David C. Clark, in Fort Worth as traffic and sales manager.

Scandinavian Airlines System: Sven Parrild has moved from Stockholm to New York to take over the company's advertising and sales promotion activities.

TWA: Eric M. Constable has taken

(Concluded on Page 18)

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1 A comprehensive and fully illustrated booklet, *Package Engineering*. Slanted toward the user, it nevertheless gives a detailed study of the technical aspects of corrugated box design. The book fills 24 pages and features 46 illustrations.

2 *The Co-Pilot*, a free directory of Esso airports in 26 states. Contains such data as grades of aviation gas handled, class or size of fields, hours during which service can be expected, etc.

3 New York State airport map and directory. Measures 28" x 21". Supplies all needed information concerning airports in that state.

4 Reference file of air express uses. Put up in handy form. An excellent file for the progressive traffic man. Presents interesting case histories which should be of value.

5 Periodic inspection record for maintenance of fire extinguishers. Certainly a handy chart for any firm with fire extinguishers on its premises. Don't forget: fire extinguishers are emergency equipment, and if they're not in working condition a lot of freight can go up in smoke.

6 Sample back number of the *American Import & Export Bulletin*, giving news of developments in the foreign trade industry. Covers Customs, Commerce, Agriculture, Treasury, and State Departments thoroughly. Reports on changes in laws, rules, regulations, etc.

7 Official Civil Aeronautics Board regulations of international air freight forwarders. Complete text, covering definition, classification and exemption, limitations and conditions, letters of registration, insurance, and general data.

8 A handsome, eight-inch, plastic rule, also showing the metric scale on the reverse side. This is offered by a well-known freight forwarding firm. If you want more than one, please specify on coupon.

9 File-sized booklet designed and written for the purpose of taking the guesswork out of selecting and using corrugated and solid-fibre shipping cases. Includes the advantages, applications, composition, forms, properties, and sealing techniques of case sealing adhesives for hand or machine sealing operations. Illustrated.

10 A catalog of 150 pages detailing a comprehensive list of aviation supplies and materials. Special index simplifies the finding of items. Only airlines, airport operators, etc., may apply for this free book.

11 *American Foreign Trade Definitions*, a 32-page book of high value to shippers everywhere. Includes a chart showing the various steps taken from the time a shipment leaves the consignor to the moment it reaches the consignee. Produced and offered by one of the larger freight forwarding companies.

12 A complete, 40-page list of independent foreign freight forwarders registered with the Federal Maritime Board under General Order No. 72. The only one of its kind published.

13 Civil Aeronautics Board's Economic Regulations governing domestic air freight forwarders. This is the complete official text.

14 A four-page illustrated description of three new-type fire extinguishers, explaining their functions and special uses. Gives complete information on each unit, including its characteristics.

15 Six-page, two-color brochure prepared by Mobilift Corporation, illustrating its two new 2,000-pound capacity Lev-R-Matic Drive Fork Lift Trucks.

16 Tests on cargo aircraft are just as rigid as those on passenger planes. Here's an illustrated catalog offering a complete line of aircraft maintenance and service machines to fulfill test requirements of all systems and components for all aircraft. Only airline men need apply.

17 Complete information on the Grip-A-Tab line of automatic dispensers of sealing tape. Will handle tapes as narrow as a quarter-inch and as wide as eight inches. Can take care of all heavy-duty tapes.

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18 An attractive and valuable wall chart in color, showing the proper procedures in storing gummed tape, the use of automatic dispensers, and the application of gummed tape. Should be on the walls of all shipping departments. Illustrations tell the story in a glance.

19 *What Every Shipper Should Know*, a 24-page, fully illustrated manual devoted to proper packaging with sealing tape. Includes directions for sealing various types of packages—telescope cartons, soft-wraps, irregular shapes, etc. Also contains essential excerpts of regulations covering parcel post, railway express, air express, and motor carrier.

20 A complete directory of all Railway Express Agency offices which provide air express service. Offices are listed alphabetically to facilitate detection. Should be on the desk of every traffic man and shipper.

21 *The Blue Book of Packaging*—a 24-page, fully-illustrated booklet showing the various methods of securing shipments with steel strapping. Covers every conceivable type of container. Includes a strapping schedule indicating savings effected through the use of such strapping.

22 *Handbook of Material Handling with Industrial Trucks*—71 pages of information of particular significance to volume shippers. Illustrated with photographs and charts. Composed of four sections including (1) Evaluation of Industrial Truck Handling, (2) Material Handling Management, (3) Organizing and Industrial Truck Systems, and (4) Practical Truck Engineering.

23 *Float Packaging*—a 12-page, three-color, illustrated booklet on Kimpak creped wadding, a versatile interior packaging material. Demonstrates its various uses: blocking and bracing; flotation; absorbent packing; surface protection.

24 A Certified Job Study prepared for the warehousing industry. Analysis shows how $3,000 a year is saved on one item alone, with mass handling. Man-hour costs cut 50 to 75 percent and storage space increased up to 300 percent.

25 Traffic men and other executives always are interested in the efficient maintenance of business records and effective control over all phases of the department. Here's an 80-page illustrated book in color, *Kardex Visible Record Control*. Describes various combinations of record forms which may be incorporated in Kardex pockets and the great variety of colored signal control methods used on the visible margin of the records.

26 Case histories of packaging and shipping short cuts. In one of the cases, it is shown how an ironing-board manufacturer cut packaging costs by 87 percent.

27 A Certified Job Study showing how a certain line was able to reduce terminal storage and save time in loading and unloading materials. In one of the illustrated cases, a job which formerly required 72 man-hours was cut to 12; in another, an eight-man-hour operation was reduced to a mere 20 minutes.

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28 *Your Foreign Shipping Handbook*, a descriptive booklet, in color, issued by the Foreign Traffic Department of American Express. Introduces in graphic form the various services of the company's international shipping setup.

29 TWA's new air freight folder, which explains why shipping-by-air aids business. Gives examples of some low rates for certain commodities. Includes a map of TWA's coast-to-coast service and connecting routes.

30 Attractive illustrated eight-page brochure which shows how handling time can be cut 85%. Excellent for executives whose firms afford warehouses or who are located at terminals airports, etc.

31 Complete details on a speedy method for tagging boxes for storage or shipment by means of an automatic one-hand tacker for driving staples and fastening tags to various types of containers. Easily assembled and disassembled. Also a new-type kit for holding 1,000 staples and which fits into a vest pocket.

32 Twenty-eight-page booklet, in color, which describes the functions of overhead trolley conveyors. Profusely illustrated. Visual lesson on the valuable work of overhead conveyors.

33 Ready reference catalog of the Mercury line of materials handling equipment. Includes tractors, trailers, and lift trucks. Well illustrated and in color.

34 A study of a certain area which proved that the intelligent use of containers can get the shipper more miles per shipping dollar. Interesting reading.

Congratulations

(*Continued from Page 15*)

over the office of treasurer . . . Thomas K. Tayler has been elected assistant vice president.

Western Air Lines: Stan Blunt, Jr., heads the St. Paul sales district . . . Lawrence A. Nichols manages the newly formed sales district.

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111 JOHN STREET NEW YORK, N. Y.

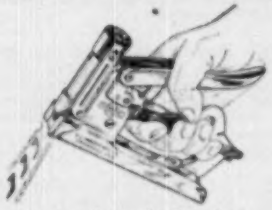
NEW EQUIPMENT FOR THE *Shipper & Carrier*

DERBY SEALERS, INC., reports that "recently introduced automatic dispensers for all types of pressure-sensitive tapes are proving substantial tape and time savings" in plants everywhere. The company's Grip-A-Tab machines will handle tapes as narrow as a quarter-inch and as wide as eight inches. The illustrated model may be set to dispense any length of tape up to two inches wide, and will cut all of the heavy-duty tapes (cloth, filament, glass, fibre, etc.). A foot treadle or air cylinder can be attached to speed up production. Several rolls of tape, depending on width, may be loaded and simultaneously dispensed in uniform strips.

For more information, encircle number 17 in the coupon on the *Come 'n' Get It* page.

An entirely new principle of sealing which eliminates the problem of polyethylene sticking to the sealing iron is employed in Amsco Package Machinery's new hand sealer. Extremely light in weight, it may be used all day without fatigue.

The A. L. Hansen Manufacturing Company has produced a new fast method for tagging boxes for storage or shipment, in



Automatic one-hand tacker

the form of an automatic one-hand tacker which drives staples and fastening tags to boxes, crates, and other containers. It may also be used for tacking protective lining inside shipping cases. Easily carried, it holds from 84 to 140 staples—depending on the model. The tacker uses staples up to a quarter-inch in length, other models accommodating half-inch staples. It may be assembled or disassembled in a jiffy.

Hansen also has come through with a Vest-Kit—a device which holds 1,000

Vest-Kit for staples

staples and which fits snugly into a vest pocket for easy access. Five kits are placed in a single box.

For full information on the tacker and Vest-Kit, encircle number 31 in the coupon on the *Come 'n' Get It* page.

AIR SHIPPING ★★★

[REG. U. S. PAT. OFF.]

International Airline Cargo Rates

(including U. S. possessions and territories)

Air cargo rates quoted in this section refer only to points served direct by carriers, or by transhipment aboard aircraft of the same company. Interline agreements among most carriers enable shippers to route their cargoes via connecting airlines to nearly every part of the world. Rates are based on prevailing tariffs, airport to airport (no code).

Shippers are warned, however, that these rates are subject to change.

All international rates are quoted on an airport-to-airport service, with the pickup and delivery charges wholly apart.

Air carriers whose schedules and rates are included here are indicated by the letter following the airport symbol (see below).

AIRPORT SYMBOLS

ANC—Anchorage	MEM—Memphis
BAL—Baltimore	MEX—Mexico City
BGR—Bangor, Me.	MIA—Miami
BRO—Brownsville, Tex.	MKE—Milwaukee
BOS—Boston	MSP—Minneapolis-St. Paul
GRO—Brownsville, Tex.	MOB—Mobile
BTV—Burlington, Vt.	ML—Montreal
CHS—Charleston, S. C.	MSY—New Orleans
CHI—Chicago	LGA—New York (La Guardia)
CLE—Cleveland	IDL—New York (Idlewild)
CRP—Corpus Christi, Tex.	EWR—Newark
CTB—Cut Bank, Mont.	ORF—Norfolk
DAL—Dallas	RLD—Nuevo Laredo, Mex.
DEN—Denver	OAK—Oakland, Calif.
DET—Detroit	PUK—Paducah, Ky.
DLH—Duluth	PIA—Peoria, Ill.
ELD—El Dorado, Ark.	PHL—Philadelphia
ELP—El Paso	PIT—Pittsburgh
EVV—Evansville, Ind.	PDX—Portland, Or.
FWA—Fort Wayne, Ind.	PVD—Providence
FTW—Fort Worth	QY—Quincy, Mass.
GFK—Grand Forks, N. D.	RIC—Richmond, Va.
GRW—Greenwood, Miss.	STL—St. Louis
HDN—Hartford	SLC—Salt Lake City
HAV—Havana	SAT—San Antonio
HOT—Hot Springs, Ark.	SFO—San Francisco
HOU—Houston	SAV—Savannah
IND—Indianapolis	SEA—Seattle
JAN—Jackson, Miss.	SHV—Shreveport, La.
JAX—Jacksonville	GEG—Spokane, Wash.
MKC—Kansas City, Mo.	SGF—Springfield, Mo.
KIN—Kingston, Jam.	TPA—Tampa
LRD—Laredo	HMF—Terre Haute, Ind.
LIT—Little Rock, Ark.	TOL—Toledo, Ohio
LAX—Los Angeles	YTO—Toronto, Ont.
	VR—Vancouver, B. C.
	DCA—Washington, D. C.

AIRLINE SYMBOLS

A—American Airlines
AF—Air France
AL—Aerolineas Argentinas
B—Braniff International Airways
BC—British Commonwealth Pacific Airlines
BO—British Overseas Airways Corp.
CS—Chicago & Southern Air Lines
C—Colonial Airlines
E—Eastern Airlines
EA—Empress Asiaw Internationaux
EL—El Al Israel National Airlines)
K—KLM Royal Dutch Airlines
L—Linea Aeroa Mexicanae (LAMSA)
LI—Linee Aeree Italiane
LV—Linea Aeropostal Venezolana
N—National Airlines
NE—Northeast Airlines
NW—Northwest Airlines
P—Pan American World Airways and Affiliates
PH—Philippine Air Lines
S—Sabena
SK—Scandinavian Airlines System
SW—Southwest & Western
SR—Swissair
TA—TACA Airways
T—Trans-Canada Air Lines
TW—Trans World Airlines
U—United Air Lines
W—Western Air Lines

SPECIAL NOTES

COMMODITY RATES: Apply to airlines.

AO: Valuation charge is applicable only on shipments with a valuation of over $7.48 per pound. Minimum charge is as for 1 lb(s) (4.4 lbs.).

E: Valuation charge is applicable only on shipments equal to or more than $7.48 per pound.

K: Valuation charge is only on shipments with a declared valuation in excess of $7.71 per lb.

L: Shipments of less than 20 lbs. are sent air express.

P: Valuation charge is only on shipments with a declared valuation in excess of $7.71 per lb.

PH: To any destination in the Philippines served from Manila by PAL (where routing is via PAL from San Francisco) add 10¢ per pound to rates shown as applying to Manila.

SW: Special rates for shipments of 100-999 lbs. and 1,000 lbs. and over.

T: More economical rates are offered for bulk cargo. There is a basic rate for cargoes 25 pounds and less, between 25 pounds and 100 pounds, and over 100 pounds. Consult the airline direct.

TC: Cheaper "deferred" rate available. Contact airline direct.

RATE SYMBOLS

* This involves onward carriage by another airline.
** Per $110 (Canadian Currency) value, pro-rata.
‡ Minimum charge for this shipment is that for 25 lbs.
△ Rate of 25 lbs. or less.
▸ Minimum weight 50 lbs.
† Minimum charge per shipment $5.00.
° Consult airline for lower rates applicable to 1,000 lbs. and over.
/ Minimum charge per shipment $6.00.
a/ Daily freighter service.
m Truck to Miami.
c Canadian Currency.

Destination	Airport and Airline	RATES (See Note)				Depart
		Up to 25 lbs.	Over 25 lbs.	Over 100 lbs.	Over 1000 lbs.	
Aalborg, Denmark	IDL SR	1.18	.99	.20		Dly
Aarhus, Denmark	IDL SR	1.17	.98	.20		Dly
Abadan, Iran	IDL BO	1.75	1.31	.35		Dly
"	IDL SR	1.75	1.32	.35		Su,Th
Abidjan, Ivory Coast	IDL AF	1.42	1.32	.35		Su,M,W,Th
"	BOS AF	1.50	1.20	.38		T,Th
Abo, Finland	IDL SR	1.22	.91	.20		Dly
Accra, Br. Gold Coast	LGA P	1.54	1.16	.35		M,Th
"	BOS P	1.51	1.13	.35		Dly
"	IDL BO	1.54	1.16	.35		Su,M,T,Th,F
"	IDL AF	1.42	1.32	.35		M
"	BOS AF	1.50	1.20	.38		Su,T
Addis Ababa, Ethiopia	IDL BO	1.84	1.38	.35		Dly
"	LGA TW*	1.84	1.38	.35		M,Th
Aden, Aden	IDL BO	1.84	1.38	.35		Dly
Ahmedabad, India	LGA P	2.05	1.54	.35		
"	BOS P	2.02	1.51	.35		
Albertville, Belgian Congo	IDL S	1.69	1.42	.35		T,Th,Sa
Alexandria, Egypt	IDL LI	1.54	1.17	.35		Th
"	IDL AF	1.54	1.16	.35		F
Algiers, Algeria	LGA TW	1.38	.95	.35		F
"	IDL AF	1.38	.95	.35		Dly
"	BOS AF	1.34	.94	.35		Dly
Amsterdam, Neth.	IDL S	1.08	.79	.20		T,W,Th,Sa
"	IDL BO	1.08	.80	.20		Dly
"	MIA BO	1.11	.84	.20		Dly
"	IDL P	1.08	.80	.20		

Destination	Airport and Airline	RATES (See Note)				Depart
		Up to 25 lbs.	Over 25 lbs.	Over 100 lbs.	Over 1000 lbs.	
Amsterdam, Cont'd	BOS P	1.08	.79	.22		
"	IDL SR	1.06	.80	.20		Dly except M
"	IDL AF	1.06	.80	.20		Dly
"	BOS AF	1.06	.77	.20		Dly
"	IDL K	1.06	.80	.20		Dly except M
"	UL K	1.10	.68	.20		Su,W
Anchorage, Alaska	SEA P	.65	.18	.15		Dly
"	SEA NW	.33	.15	.15		Dly
"	MPS NW	.35	.20	.15		Dly
Antigua, B.W.I.	LGA P*	.34	.34	.15		M,Th,F
"	MIA P*	.35	.16	.15		M,Th,F
Antilla, Cuba	MIA P*	.20	.10	.15		Dly
Antofagasta, Chile	MIA P*	1.13	.61	.30		M,T,Sa
"	MSY P*	1.19	.68	.30		M,T,Sa
"	HOU P*	1.33	.71	.38		Su,M,F
"	BRO P*	1.33	.71	.38		Su,M,F
"	LAX P*	1.35	.83	.38		Su,M,F
"	LGA P	1.38	.70	.38		
Arequipa, Brazil	LGA P*	1.84	1.84	.35		W,F,Sa
"	MIA P*	1.38	1.38	.38		W,F,Sa
"	MSY P*	1.53	1.53	.38		Su,W,Sa
"	HOU P*	1.63	1.63	.38		T,Th,F,Sa
"	BRO P*	1.60	1.60	.38		T,Th,Sa
"	LAX P*	1.90	1.90	.38		Su,T,Th,F
Arequipa, Peru	MIA P*	1.60	.88	.38		Su,M,W,F,Sa
"	MSY P*	1.66	.88	.38		Su,M,W,T,Th,Sa
"	HOU P*	1.80	.88	.38		Dly except M
"	BRO P*	1.80	.88	.38		Dly except M
"	LAX P*	1.90	.77	.38		Su,W,Th,F,Sa

Destination	Airport and Airline	RATES (See Note)				Depart
		Up to 25 lbs.	Over 25 lbs.	Over 100 lbs.	Over 1000 lbs.	
Arica, Chile	MIA P*	1.06	.57	.30		M,F
"	MSY P*	1.12	.64	.30		M,F
"	HOU P*	1.15	.67	.30		M,F
"	BRO P*	1.15	.67	.30		M,F
"	LAX P*	1.20	.81	.30		M,F
Arequipa, Colombia	MIA P*	.80	.38	.15		Dly
"	MSY P*	.86	.38	.15		Dly
"	HOU P*	.86	.38	.15		Dly
"	BRO P*	.86	.38	.15		Dly
"	LAX P*	.70	.80	.15		Dly
"	LGA P*	1.84	.37	.15		Dly
Aruba, N.W.I.	MIA P*	.30	.30	.15		Dly
"	IDL P*	.30	.30	.15		Su,W
Asmara, Eritrea	IDL SR	1.73	1.38	.35		M,T,Th,F
Asuncion, Paraguay	LGA P*	1.47	1.20	.38		
"	MIA P*	1.20	.77	.35		T,F
"	MSY P*	1.46	.84	.35		M,Th
"	HOU P*	1.49	.87	.35		Su,W
"	BRO P*	1.49	.87	.35		Su,W
"	LAX P*	1.65	1.01	.35		Su,W
"	BRO P*	1.80	.88	.38		Su,W
"	CHI P*	1.80	.88	.38		Su,W
"	CRP P*	1.80	.88	.38		Su,W
"	DAL P*	1.80	.88	.38		Su,W
"	YIP P*	1.80	.88	.38		Su,W
"	FTW P*	1.80	.88	.38		Su,W
"	HAV P*	1.39	.77	.35		Su,W
"	HOU P*	1.49	.87	.35		Su,W
"	IND P*	1.84	.87	.35		Su,W
"	LRD P*	1.80	.88	.38		Su,W
"	MSY P*	1.46	.84	.35		W,Sa
"	SAT P*	1.80	.88	.38		W,Sa
"	EWR TC	1.79	1.39	....		Frequently
Athens, Greece	IDL SR	1.37	1.11	....		Su
"	IDL SW	1.38	1.08	.38		
"	IDL LI	1.44	1.08	.38		M,T,Th
"	IDL BO	1.44	1.08	.38		Dly
"	MIA BO	1.48	1.11	.38		Dly
"	IDL AF	1.44	1.08	.35		Weekly
"	BOS AF	1.41	1.06	.35		T,Th
"	IDL P*	1.44	1.08	.38		Su
"	UL K	1.50	1.14	.38		Su
"	IDL SR	1.44	1.08	.38		Su,T,W,Th,Sa
"	LGA TW	1.44	1.08	.38		
"	CHI TW	1.49	1.13	.38		Dly
"	PHL TW	1.43	1.09	.38		Dly
"	BOS TW	1.41	1.07	.38		M,F
"	YIP TW	1.46	1.10	.38		Dly
"	IDL S	1.44	1.08	.38		T,Th,Sa
"	IDL SR	1.44	1.08	.38		Su,W,F
"	IDL AF	1.44	1.08	.38		
"	BOS P*	1.44	1.07	.38		
Auckland, N. Z.	LAX P	1.73	1.32	.35		Sa
"	SFO P	1.73	1.32	.35		Sa
"	PDX P	1.73	1.32	.35		Sa
"	SEA P	1.73	1.32	.35		Sa
"	SFO BC	1.70	1.32	.35		F
"	HNL BC	1.10	1.10	.35		F
"	VR BC	1.70	1.32	.35		F
Baghdad, Iraq	IDL AF	1.70	1.37	.35		Weekly
"	BOS AF	1.71	1.39	.35		T,Th
"	IDL BO	1.70	1.37	.35		Dly
"	IDL K	1.70	1.37	.35		W,Th
"	UL K	1.80	1.35	.35		W
Bahia, Brazil (See Sao Salvador)						
Bahrein, Arabia	IDL BO	1.60	1.32	.35		Dly
"	IDL P	1.80	1.35	.35		
"	BOS P	1.70	1.34	.35		
Balboa, Canal Zone	MIA P*	.30	.19	.10		Dly
"	MSY P*	.45	.30	.10		Dly
"	HOU P*	.40	.30	.10		Dly
"	BRO P*	.45	.30	.10		Dly
"	LAX P*	.61	.43	.10		Dly
Bangkok, Siam	LGA P	2.32	1.66	.35		Su,T,W,F
"	PHX P	2.70	2.03	.35		Th,Sa
"	SFO P	2.70	2.03	.35		Th,Sa
"	LAX P	2.70	2.03	.35		T,F,Sa
"	SEA P	2.70	2.03	.35		T,F
"	SFO P	2.70	2.03	.35		Su,T,F,Sa
"	IDL SR	2.32	1.66	.35		Su,T,W,Th,Sa
"	IDL AF	2.32	1.74	.35		M,T
"	BOS AF	2.39	1.72	.35		T,Th
"	LGA TK	2.24	2.06	.35		
"	IDL BO	2.24	1.68	.35		Dly
"	IDL P	2.32	1.66	.35		Su,T,W,F
"	FTL K	2.39	1.79	.35		Su,W
"	IDL K	2.39	1.80	.35		
"	PDX W*	2.80	1.80	.35		
"	SEA W*	2.80	1.80	.35		
Bangui, Belg. Congo	IDL S	1.69	1.42	.35		T,W,Th,Sa
Barcena, Cuba	MIA P*	.18	.12	.05		Dly
Barcelona, Spain	IDL AF	1.15	.85	.30		Twice Wkly
"	BOS AF	1.18	.85	.30		Twice Wkly
"	IDL SA	1.41	1.06	....		Su
"	LGA P	1.13	.88	.30		Su,F
"	BOS P	1.10	.88	.30		Su,F
"	IDL SR	1.21	.91	.30		Su,Th
"	LGA TW*	1.13	.88	.30		Dly
"	BOS TW*	1.10	.88	.30		Su,Th,Sa

Destination	Airport and Airline	RATES (See Note) 45 kg 100 lbs	100 kg 220 lbs	250 kg 551 lbs	500 kg 1102 lbs	Days
Bucaramanga, Venezuela	MIA E	.92	.70	.55	W,F
	UL E	.86	.61	...	W,F
Buenos Aires, Argentina	MIA P*	.84	.58	.55	Dly
	LGA P*	.84	.57	.54	Dly
	MSY P*	.84	.57	.54	Dly
	HOU P*	.84	.57	.54	Dly
	BRO P*	.84	.57	.54	Dly
	LAX P*	.77	.53	.54	Su,T,Th,Sa
Bucaramanga, Col.	MIA P*	.89	.59	.55	Dly
	LGA P*	.89	.59	.55	Dly
	MSY P*	.89	.59	.55	Dly
	HOU P*	.89	.59	.55	Dly
	BRO P*	.89	.59	.55	Dly
	LAX P*	.89	.59	.55	Dly
	MIA E	.41	.36	.35	Su,W,F
	UL E	.39	.36	.17	F
Bujumbura, Belgian Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa
Buly, Switzerland	IDL SR	1.10	.87	.30	Dly
	IDL AF	1.10	.88	.30	Dly
	BOS AF	1.10	.88	.30	Twice Wkly
	IDL K	1.10	.88	.30	T,W,F,Sa
	UL K	1.10	.88	.30	Su,W
	LGA P	1.12	.88	.30	.....
	BOS P	1.10	.88	.30	.....
	IDL SR	1.12	.88	.30	Su,Th
	IDL SR	1.12	.88	.30	Dly
	IDL BO	1.12	.88	.30	Dly
Bucuyk, Iraq	IDL K	1.72	1.33	.30	F,Sa
	UL K	1.72	1.33	.30	Su
	IDL BO	1.72	1.33	.30	Dly
	IDL AF	1.72	1.33	.35	Su,T,Th,F,Sa
	BOS AF	1.70	1.33	.35	Su,T,Th
	LGA TW	1.72	1.33	.35	Su,W,F
	IDL SR	1.72	1.33	.35	Su,W,F
	IDL P	1.72	1.33	.35	.....
	BOS P	1.70	1.37	.35	.....
Bayamo, Cuba	MIA P*	.84	.60	.55	Dly
Bayrut, Lebanon	IDL AF	1.84	1.18	.35	Dly
	BOS AF	1.84	1.18	.35	T,Th
	LGA P	1.84	1.16	.35	.....
	BOS P	1.81	1.14	.35	.....
	LGA TW	1.84	1.16	.35	.....
Belem, Brazil	LGA P*	.94	.69	.30	Dly
	MIA P*	.90	.61	.30	Dly
	MSY P*	.90	.61	.30	Dly
	HOU P*	.90	.61	.30	Dly
	BRO P*	.90	.61	.30	Dly
	LAX P*	1.05	1.03	.30	Dly
	IDL AL	.94	.68	.30	F
Belfast, N. Ireland	IDL SR	.90	.74	.30	Dly
	IDL BO	.90	.74	.30	Dly
	MIA BO	1.12	.94	.30	Dly
	IDL AF	1.11	.94	.30	Dly
	BOS AF	1.08	.92	.30	Twice Wkly
Belgrade, Yugoslavia	IDL SR	1.10	1.05	.35	Su,T,W,Th,Sa
	IDL SR	1.10	1.05	.35	Su,M,W,F
	IDL AF	1.08	1.04	.35	.....
	BOS AF	1.08	1.04	.35	.....
	IDL SR	1.10	1.05	.35	Dly
	BRO TW	1.12	.98	.35	.....
	LAX TW	1.10	1.04	.35	Dly
Belize, Br. Hond.	MSY TA	.33	.28	...	Th
	MEX TA	.33	.24	...	Th
Belo Horizonte, Brazil	LGA P*	1.04	1.04	.35	Dly
	MIA P*	1.04	1.04	.35	.....
	MSY P*	1.04	1.04	.35	.....
	HOU P*	1.04	1.04	.35	.....
	BRO P*	1.04	1.04	.35	.....
	LAX P*	1.90	1.04	.35	Dly
Berlin, Germany	IDL BO	1.17	.98	.30	Dly
	MIA BO	1.30	.98	.30	Dly
	IDL AF	1.18	.98	.30	Dly
	BOS AF	1.18	.97	.30	T,Th
	IDL K	1.18	.98	.30	Su,T,W,F
	UL K	1.18	.98	.30	Su,W
	IDL P	1.18	.97	.30	.....
	BOS P	1.16	.97	.30	.....
Bermuda	LGA C	.18	.16	.16	Dly
	DCA C	.18	.16	.16	T,Th,F
	LGA P	.20	.16	.16	Dly
	BOS P	.20	.16	.16	Dly
	PHL TW*	.20	.16	.16	Dly
	UL SRC	SRC	SRC	SRC	W,F,Sa
	YYG T	SRC	SRC	SRC	W,F,Sa
	MIA BO	.22	.19	.16	Dly
Berne, Switzerland	IDL SR	1.14	.87	.30	Su,Th
	BOS P	1.12	.85	.30	.....
	IDL P	1.10	.87	.30	.....
Birmingham, England	IDL AF	1.11	.94	.30	Dly
	BOS AF	1.04	.92	.30	Su,T
	LGA TW*	.94	.74	.30	Dly
	BOS TW*	.96	.72	.30	M,W,F
	CHI TW*	1.00	.78	.30	F
	YYZ TW*	1.00	.78	.30	F
	PHL TW*	.98	.74	.30	Sa
	IDL K	.98	.74	.30	.....
	IDL BO	.98	.74	.30	Dly
Bissau, Portuguese Guinea	IDL BO	1.87	1.48	.35	Su,M,T,Th,F
Blantyre, Nyasaland Blumenfontein, So. Africa	IDL BO	1.87	1.48	.35	Su,M,T,Th,F
Bluefields, Nicaragua	MSY TA	.33	.42	...	M,W,F
	MEX TA	.44	.33	...	T,Th,Sa
Bogota, Colombia	MIA P*	.84	.57	.54	Dly
	LGA P*	.84	.57	.54	Dly
	MSY P*	.84	.57	.54	Dly
	HOU P*	.84	.57	.54	Dly
	BRO P*	.84	.57	.54	Dly
	LAX P*	.77	.53	.54	Dly

Destination	Airport and Airline	RATES (See Note) 45 kg 100 lbs	100 kg 220 lbs	250 kg 551 lbs	500 kg 1102 lbs	Days
Bombay, India	IDL BO	2.05	1.54	.35	Dly
	LGA TW	2.05	1.54	.35	M,W,F
	IDL K	2.10	1.58	.35	T,W,Th,F,Sa
	LGA P	2.05	1.54	.35	.....
	BOS P	2.05	1.51	.35	.....
	IDL AF	2.05	1.54	.35	.....
Brandon, N.W.I.	MIA K	.30	.22	.15	Dly
Bragana, Nicaragua	MSY TA	.33	.25	.10	M,W,F
	MEX TA	.44	.34	...	T,Th,Sa
Bordeaux, France	IDL BO	1.12	.84	.30	Dly
	IDL AF	1.12	.84	.30	Dly
	BOS AF	1.09	.82	.30	T,Th
	IDL P	1.12	.84	.30	.....
	BOS P	1.09	.82	.30	.....
Bournville, Fr. Eq. Af.	IDL AF	1.73	1.30	.35	Weekly
	BOS AF	1.73	1.30	.35	T,Th
	IDL K	1.96	1.47	.35	T,F
	UL K	2.10	1.57	.35	Su,W
Bremen, Germany	IDL SR	1.12	.86	.30	Dly
	IDL P	1.12	.86	.30	.....
	BOS P	1.10	.86	.30	.....
	IDL AF	1.12	.86	.30	.....
	BOS AF	1.10	.86	.30	.....
Bridgetown, Barbados	UL T	SRC	SRC	.17	Su,F
	TO T	SRC	SRC	.17	Su,F
	LGA T	.34	.32	...	F
Brussels, Belgium	IDL S	1.05	.79	.30	T,W,Th,Sa
	BOS P	1.05	.78	.30	Su,T,W,F
	IDL SW	.93	.74	.30	.....
	IDL BO	1.05	.80	.30	Dly
	MIA BO	1.10	.81	.30	Dly
	IDL SR	1.08	.80	.30	Su,T,W,Th,Sa
	IDL AF	1.08	.80	.30	Dly
	BOS AF	1.05	.78	.30	T,Th
	IDL K*	1.08	.80	.30	Dly
	UL K	1.10	.81	.30	T,W,F
Bucaramanga, Colombia	MIA P*	.84	.58	.55	Dly
	LGA P*	.84	.57	.54	Dly
	MSY P*	.84	.57	.54	Dly
	HOU P*	.84	.57	.54	Dly
	BRO P*	.84	.57	.54	Dly
	LAX P*	.77	.53	.54	Dly
Budapest, Hungary	IDL SR	1.47	1.11	.35	Su,M,W,F
	IDL AF	1.51	1.13	.35	Dly
	BOS AF	1.48	1.12	.35	T,Th
	IDL AF	1.57	1.01	.35	Dly
	BOS AF	1.34	1.01	.35	T,Th
	IDL SR	1.32	1.00	.35	Su,T,W,Th,Sa
	IDL SR	1.31	.14	.15	Su,Th
Buenos Aires, Argentina	LGA P*	1.34	.10	.35	Twice Dly
	MIA P*	1.47	.10	.35	Twice Dly
	MSY P*	1.32	.99	.35	Dly
	HOU P*	1.32	.99	.35	Dly
	BRO P*	1.34	.10	.35	Dly
	LAX P*	1.69	1.47	.35	Dly
	BRO P*	1.34	1.01	.35	M,W,Sa
	CHI P*	1.09	.16	.15	M,W,Sa
	CRP P*	1.09	.16	.15	M,W,Sa
	DAL P*	1.09	.16	.15	M,W,Sa
	YIP P	1.09	.16	.15	M,W,Sa
	FTW P*	1.09	.16	.15	M,W,Sa
	HAV P*	1.42	.10	.15	M,W,Sa
	HOU P*	1.09	.16	.15	M,W,Sa
	IND P	1.09	.16	.15	M,W,Sa
	LRD P	1.37	.16	.15	M,W,Sa
	MSY P*	1.32	.99	.15	M,W,Sa
	SAT P*	1.09	.16	.15	Su,M,T,Th
	IDL AL	.94	.68	...	F
Bulawayo, S. Rhodesia	IDL BO	1.99	1.49	.35	Dly
Cagliari, Italy	IDL LI	1.21	.90	.35	Dly
Caimarins, Colm.	MIA P*	.14	.10	.05	Dly
Cairo, Egypt	IDL S	1.56	1.17	.35	T,W,Th,Sa
	IDL SW	1.48	1.10	.30	.....
	IDL BO	1.34	1.10	.30	Dly
	IDL AF	1.34	1.16	.35	Twice Wkly
	BOS AF	1.31	1.14	.35	T,Th
	IDL K	1.34	1.16	.35	M
	IDL S	1.56	1.17	.35	M,T,Th,F
	UL K	1.54	1.24	.35	W,Sa
	IDL SR	1.34	1.10	.35	Su,T,W,Th,Sa
	LGA TW	1.34	1.16	.35	Dly ex. Th,Sa
	BOS TW	1.31	1.14	.35	W,F
	PHL TW	1.36	1.16	.35	Su thru F
	CHI TW	1.36	1.16	.35	Su thru F
	YIP TW	1.36	1.17	.35	Su thru F
	IDL SR	1.33	1.17	.35	Su thru F
	LGA P	1.34	1.16	.35	.....
Calcutta, India	LGA P	2.10	1.60	.35	Su,T,F
	BOS P	2.14	1.61	.35	Su,T,F
	PDX P	2.34	2.21	.35	F
	SEC P	2.34	2.21	.35	F
	SFO P	2.34	2.21	.35	T,F,Sa
	LAX P	2.34	2.21	.35	T,F,Sa
	IDL SR	2.16	1.62	.35	Su,M,W,F
	IDL K	2.16	1.62	.35	Dly ex. M,F
	UL K	2.32	1.74	.35	Su,T,W,F
	IDL BO	2.16	1.62	.35	Su,W
	IDL AF	2.17	1.63	.35	Twice Wkly
	BOS AF	2.14	1.61	.35	Twice Wkly
	LAX TW	2.34	2.21	.35	F
	LAX W*	2.17	2.20	.30	.....
	SFO PE	2.36	2.20	.15	W,Sa
	RNL PE	2.36	1.79	.15	W,Sa
Calgary, Alb. Canada	LGA T*	0.30	.31	.10	Dly

Destination	Airport and Airline	RATES (See Note) 45 kg 100 lbs	100 kg 220 lbs	250 kg 551 lbs	500 kg 1102 lbs	Days
Cali, Colombia	MIA P*	.84	.58	.55	Dly
	LGA P*	.84	.57	.54	Dly
	MSY P*	.84	.57	.54	Dly
	HOU P*	.84	.57	.54	Dly
	BRO P*	.84	.57	.54	Dly
	LAX P*	.77	.53	.54	Dly
Camagney, Cuba	MIA P*	.13	.08	.05	Dly
Campeche, Mexico	MIA P*	.22	.16	.15	Dly
	MSY P*	.22	.16	.15	Dly
	HOU P*	.22	.16	.15	Dly
	BRO P*	.22	.16	.15	Dly
	LAX P*	.44	.32	.15	Dly
Canavan Sac., Mex.	MEX L	.18	.15	...	Dly
Cannes, France	IDL AF	1.17	.88	.30	Dly
	BOS AF	1.14	.88	.30	Dly
Canton Island	LAX P	1.38	.98	.30	M,Th,Sa
	SFO P	1.38	.98	.30	M,Th,Sa
	PDX P	1.38	.98	.30	M,Th,Sa
	SEA P	1.38	.98	.30	M,Th,Sa
	YB SRC	1.38	.98	.30	M,Th,Sa
Capetown, U. S. Af.	IDL BO	2.18	1.66	.35	Su,M,T,Th,F
Carenas, Venezuela (See La Guaira)					
Carupano, Colombia	MIA P*	.88	.58	.55	Dly
	LGA P*	.88	.58	.55	Dly
	MSY P*	.88	.58	.55	Dly
	HOU P*	.88	.58	.55	Dly
	BRO P*	.88	.58	.55	Dly
	LAX P*	.81	.67	.54	Dly
Casablanca, Fr. Morocco	BOS AF	1.37	.98	.35	.....
	IDL AF	1.30	.98	.35	Dly
Catania, Italy	IDL LI	1.35	.96	.35	Dly
Catmarca, Argentina	LGA P*	.79	.62	.15	Dly
	MIA P*	.84	.62	.15	Dly
	MSY P*	.79	.62	.15	Dly
	HOU P*	.79	.62	.15	Dly
	BRO P*	.79	.62	.15	Dly
	LAX P*	.87	.69	.15	Dly
Cayo Mantil, Cuba	MIA P*	.14	.12	.08	Dly
Chetumal, Mexico	MIA P*	.22	.16	.15	Dly
	MSY P*	.22	.16	.15	Dly
	HOU P*	.22	.16	.15	Dly
	BRO P*	.21	.15	.15	Dly
	LAX P*	.47	.36	.15	Dly
Chihuahua, Chih., Mex.	MEX L	.13	.11	...	Dly
Christiansund, Norway	IDL S*	1.13	.85	.30	W,F,Sa
	UL K	1.16	.90	.32	Su,W
C. del Carmen, Mexico	MIA P*	.21	.16	.15	Dly
	MSY P*	.22	.16	.15	Dly
	HOU P*	.22	.16	.15	Dly
	BRO P*	.22	.16	.15	Dly
	LAX P*	.41	.32	.15	Dly
Ciudad Juarez, Chih., Mex.	MEX L	.16	.14	...	Dly
Ciudad Trujillo, D.R.	LGA P*	.10	.71	.06	Dly
	MIA P*	.15	.12	.09	Dly
	MIA K	.15	.12	.15	Th
Ciudad Victoria, Mexico	DAL B	.20	...	.10	Dly
	FTW B	.20	...	.10	Dly
	SAT B	.20	...	.10	Dly
	LRD B	.16	...	.10	Dly
Cochabamba, Bolivia	MIA P*	1.12	.82	.15	M,W,F,Sa
	MSY P*	1.12	.82	.15	M,W,F,Sa
	HOU P*	1.12	.82	.15	M,W,F,Sa
	BRO P*	1.12	.82	.15	M,W,F,Sa
	LAX P*	1.24	.98	.15	M,W,F,Sa
Colombia, Any Destination other than those named herein	MIA P	.92	.72	.15	Dly
	MSY P	.72	.52	.15	Dly
	HOU P	.74	.52	.15	Dly
	BRO P	.74	.52	.15	Dly
	LAX P	.88	.66	.30	Dly
Colombo, Ceylon	IDL BO	2.14	1.61	.35	Dly
	BOS P	2.12	1.59	.35	.....
	IDL P	2.14	1.61	.35	.....
Concepcion, Bolivia	MIA P*	1.16	.86	.30	M,F
	MSY P*	1.22	.92	.35	M,F
	HOU P*	1.22	.92	.35	M,Th
	BRO P*	1.20	.73	.35	M,Th
	LAX P*	1.20	.87	.35	M,Th
Copenhagen, Denmark	IDL SR	1.13	.85	.30	.....
	IDL S	1.13	.84	.30	T,W,Th,Sa
	IDL AF	1.13	.82	.30	Dly
	BOS AF	1.10	.82	.30	Dly
	IDL K*	1.13	.85	.30	Su,T,W,F,Sa
	UL K	1.16	.88	.32	Su,W
	IDL BO	1.13	.85	.30	Dly
	MIA BO	1.34	.85	.30	Dly
	BOS P	1.10	.85	.30	.....
	IDL P	1.13	.85	.30	.....
Coquilhatville, Belgian Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa
Cordoba, Argentina	MIA P*	1.26	.78	.15	F
	MSY P*	1.42	.92	.15	F
	HOU P*	1.42	.92	.15	F
	BRO P*	1.42	.92	.15	F
	LAX P*	1.54	1.09	.15	F
Costermansville, Belgian Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa

Destination	Airport and Airline	RATES (See Note) 45 kg	100 kg	250 kg	500 kg	1000 kg	Depart
Cristobal, Canal Zone	MIA	P	.41	.31	.25	.15	Dly
	MSY	P	.47	.38	.25	.15	Dly
	HOU	P	.50	.31	.25	.15	Dly
	BRO	P	.50	.31	.25	.15	Dly
	LAX	P	.62	.46	.25	.15	Dly
Cuenca, Colombia	MIA	P	.62	.46	.25	.15	Su,M,T,Th,Sa
	LGA	P	.64	.37	.25	.15	Su,Th
	MSY	P	.66	.55	.25	.15	Su,W,F,Sa
	HOU	P	.62	.55	.25	.15	T,Th,F,Sa
	BRO	P	.62	.55	.25	.15	T,Th,F,Sa
	LAX	P	.77	.69	.25	.15	T,Th,F,Sa
Cuenca, Ecuador	MIA	P	.67	.50	.25	.15	Su,M,Th
	MSY	P	.74	.60	.25	.15	Su,M,Th
	HOU	P	.74	.60	.25	.15	Su,W,Sa
	BRO	P	.74	.60	.25	.15	Su,W,Sa
	LAX	P	.89	.80	.25	.15	Su,W,Sa
Curaçao, N.W.I.	LGA	P	.60	.31	.30	.30	Dly
	MIA	P	.30	.30	.30	.30	Dly
	MIA	K	.30	.30	.15	.15	Dly
	UL	K	.30	.30	.15	.15	M,F
Curityba, Brazil	LGA	P	1.80	1.80	.25	F	
	MIA	P	1.48	1.48	.25	F	
	MSY	P	1.85	1.80	.25	F	
	HOU	P	1.82	1.82	.25	Th	
	BRO	P	1.75	1.75	.25	Th	
	LAX	P	2.06	2.06	.25	Th	
Dakar, Senegal, F. W. Africa	LGA	P	1.20	.97	.25	M,Th	
	ENT	P	1.26	.95	.25	Su	
	IDL	AF	1.52	1.14	.25	Thrice Wkly	
	BOS	AF	1.40	1.12	.25	.....	
Damascus, Syria	LGA	P	1.54	1.16	.25	.....	
	BOS	P	1.51	1.14	.25	.....	
	IDL	SW	1.43	1.10	.25	.....	
	IDL	AF	1.55	1.17	.25	.....	
	BOS	AF	1.52	1.15	.25	.....	
	IDL	BO	1.54	1.16	.25	Su,M,T,Th,F	
	IDL	SR	1.54	1.16	.25	Dly ex. W,F	
	IDL	K	1.54	1.16	.25	Su,W	
	UL	K	1.65	1.25	.25	Su,W	
	LGA	TW	1.54	1.16	.25	.....	
Dar-es-Salaam, Tanganyika	IDL	BO	1.89	1.42	.25	Su,M,T,Th,F	
	IDL	AF	1.92	1.42	.25	Su,T,F	
	BOS	AF	1.85	1.40	.25	.....	
Darwin, Australia	IDL	BO	2.72	2.04	.25	Su,M,T,Th,F	
David, Panama	MIA	P	.45	.32	.20	Dly	
	MSY	P	.45	.36	.20	Dly	
	HOU	P	.45	.30	.20	Dly	
	BRO	P	.45	.30	.20	Dly	
	LAX	P	.77	.60	.20	Dly	
Delhi, India	IDL	BO	2.05	1.54	.25	Su,M,T,Th,F	
	LGA	P	2.66	1.94	.25	.....	
	BOS	P	2.62	1.91	.25	.....	
	LAX	P	3.09	2.22	.25	.....	
	SFO	P	3.09	2.22	.25	.....	
	PDX	P	3.09	2.22	.25	.....	
	SEC	P	3.09	2.22	.25	.....	
	IDL	K*	2.05	1.54	.25	Su,W,Th,F	
	UL	K	2.19	1.64	.25	Su	
Dhurban, Saudi Arabia	LGA	TW	1.60	1.53	.25	Su,W,F	
	IDL	P	1.60	1.35	.20	.....	
	BOS	P	1.77	1.33	.20	.....	
	IDL	K	1.60	1.35	.25	W	
	UL	K	1.91	1.44	.25	W	
Dumbo, Fr. W. Africa	IDL	AF	1.73	1.30	.25	Weekly	
	BOS	AF	1.70	1.28	.25	.....	
Dublin, Eire	IDL	BO	.94	.71	.20	Th	
	MIA	BO	1.12	.84	....	Dly	
	UL	K	1.10	.82	.22	Su	
	IDL	K*	1.05	.80	.22	Su,Th	
	LGA	TW*	.94	.71	.20	Dly	
	BOS	TW*	.91	.69	.20	M,W,F	
	CHI	TW*	.88	.75	.20	F	
	YIP	TW*	.88	.72	.20	F	
	PHL	TW*	.88	.72	.20	Sa	
	IDL	P	1.05	.80	.20	.....	
	BOS	P	1.05	.77	.20	.....	
Durango, Dgo., Mex.	MEX	L	.11	.09	....	.....	
Durban, So. Afr.	IDL	BO	2.01	1.51	.25	Su,M,T,Th,F	
Duesseldorf, Ger.	IDL	SR	1.12	.85	.20	Dly	
	IDL	S	1.09	.82	.20	T,W,Th,Sa	
	IDL	BO	1.10	.82	.20	Su,M,T,Th,F	
	MIA	BO	1.14	.86	....	Dly	
	IDL	K**	1.10	.82	.20	Th,F	
	UL	K	1.14	.86	.22	W	
	IDL	AF	1.12	.83	.20	.....	
	BOS	AF	1.07	.81	.20	.....	
	BOS	P	1.07	.81	.20	.....	
	IDL	P	1.10	.83	.20	.....	
East London, U. of S. Africa	IDL	BO	2.10	1.56	.25	Dly	
Edinburgh, Scotland	MIA	BO	1.11	.84	....	Dly	
Edmonton, Alberta, Canada	LGA	TW	0.80	.21	.10	Dly	
	CTB	W	.16	....	.10	.....	
Elizabethville, Belgian Congo	IDL	S	1.80	1.42	.25	T,W,Th,Sa	
	IDL	P	1.80	1.42	.25	.....	
Equatorville, Ecuador	MIA	P	.67	.34	.15	T	
	MSY	P	.73	.43	.15	T	
	HOU	P	.70	.40	.15	M	
	BRO	P	.70	.40	.15	M	
	LAX	P	.90	.80	.30	M	
Fairbanks, Alaska	SEA	P	.40	.15	.15	Dly	

Destination	Airport and Airline	RATES (See Note) 45 kg	100 kg	250 kg	500 kg	1000 kg	Depart
Florianopolis, Brazil	LGA	P	1.70	1.70	.25	Dly except Th	
	MIA	P	1.48	1.48	.25	Dly except Th	
	MSY	P	1.48	1.48	.25	Dly except W	
	HOU	P	1.82	1.82	.25	Dly except W	
	BRO	P	1.75	1.75	.25	Dly except W	
	LAX	P	2.06	2.06	.25	Dly	
Fort de France, Martinique	LGA	P	.30	.30	.15	.....	
Fort William, Ontario, Can.	LGA	P*	4.30	.142	.10	Dly	
Fortaleza (Ceara), Brazil	LGA	P	1.80	1.80	.25	Dly except F	
	MIA	P	1.48	1.48	.25	Dly except F	
	MSY	P	1.48	1.48	.25	Dly except F	
	HOU	P	1.80	1.80	.25	Dly except Th	
	BRO	P	1.81	1.81	.25	Dly except Th	
	LAX	P	1.72	1.72	.25	Dly except Th	
Frankfort-on-Main, Germany	BOS	P	1.10	.88	.25	Four Wkly	
	IDL	P	1.12	.88	.25	Dly	
	IDL	K*	1.12	.88	.25	T,W,F,Sa	
	UL	K	1.15	.90	.25	Sa	
	IDL	SW	.97	.75	.20	.....	
	IDL	BO	1.15	.88	.25	Dly	
	MIA	BO	1.17	.90	....	Dly	
	IDL	SR	1.12	.88	.25	Dly	
	IDL	S	1.12	.88	.25	T,W,Th,Sa	
	LGA	TW	1.12	.88	.25	M,W,Th,Sa	
	BOS	TW	1.10	.86	.25	Th	
	PHL	TW	1.14	.88	.25	W	
	IDL	SR	1.12	.84	.25	Su,Th	
	IDL	AF	1.12	.83	.20	.....	
	BOS	AF	1.10	.83	.20	.....	
Freetown, Sierra Leone	IDL	AF	1.68	1.26	.25	.....	
	BOS	AF	1.65	1.24	.25	.....	
Fronteiln, Sar., Mex.	MEX	L	.06	.05	....	Dly	
Gander, N. F.	LGA	P	.19	.15	.15	Four Wkly	
	BOS	P	.16	.15	.15	Four Wkly	
	BOS	TW	.16	.15	.05	F	
	LGA	TW	.19	.15	.05	Su,M,Th,F,Sa	
	BOS	TW*	4.41	.1005	.10	Dly	
	IDL	BO	.16	.20	.10	Dly	
	IDL	SR	.20	.20	....	Su,Th	
Geneva, Switzerland	IDL	S	1.12	.84	.25	T,W,Th,Sa	
	IDL	SW	.99	.70	.20	.....	
	IDL	BO	1.12	.83	.25	Dly	
	MIA	BO	1.15	.89	....	Dly	
	IDL	SR	1.12	.83	.25	Dly	
	IDL	AF	1.14	.84	.25	Dly	
	BOS	AF	1.09	.82	.25	Dly	
	IDL	K*	1.12	.85	.25	T,W,F	
	UL	K	1.18	.90	.25	W	
	LGA	TW	1.12	.83	.25	Dly ex. T	
	PHL	TW	1.14	.84	.25	Dly ex. T	
	BOS	TW	1.10	.83	.25	Dly ex. T	
	YIP	TW	1.14	.84	.25	Dly ex. T	
	CHI	TW	1.17	.88	.25	Dly ex. T	
	IDL	SR	1.12	.84	.25	Su,Th	
	BOS	P	1.10	.83	.20	.....	
	IDL	P	1.12	.85	.20	.....	
Georgetown, British Guiana	LGA	P	.56	.56	.15	M,Th	
	MIA	P	.49	.38	.15	M,Th	
	MSY	P	.56	.56	.15	M,Th	
	HOU	P	.59	.59	.15	F,W	
	BRO	P	.59	.59	.15	F,W	
	LAX	P	.73	.58	.15	F,W	
	MIA	K	.49	.30	.15	Sa	
Gibraltar, Gibraltar	IDL	AO*	1.30	.975	.25	Dly	
	IDL	BO	1.19	.89	.25	Dly	
Glasgow, Scotland	LGA	TW*	.94	.71	.20	Dly	
	BOS	TW*	.91	.69	.20	M,W,F	
	CHI	TW*	.88	.75	.20	F	
	YIP	TW*	.88	.72	.20	F	
	PHL	TW*	.88	.72	.20	Sa	
	IDL	BO	1.00	.75	.20	Su,T,Sa	
	MIA	BO	1.04	.78	....	Dly	
	IDL	SR	.94	.71	.20	Dly	
	IDL	AF	1.11	.84	.20	.....	
	BOS	AF	1.06	.80	.20	.....	
	IDL	K*	.94	.71	.20	T,W,F,Sa	
	UL	T	.97	.73	.22*	*Su,Th,Sa	
	IDL	P	.94	.71	.20	.....	
	BOS	P	.91	.68	.20	.....	
Gothenburg, Sweden	IDL	SR	1.13	.85	.20	Dly	
	IDL	AF	1.13	.85	.20	.....	
	BOS	AF	1.08	.80	.20	.....	
Guadalajara, Mex.	HOU	P	.22	.17	.15	Dly	
	BRO	P	.22	.17	.15	Dly	
	LAX	P	.30	.25	.15	Dly	
Guam	LAX	P	2.00	1.51	.25	T,Th,Sa	
	SFO	P	2.00	1.51	.25	T,Th,Sa	
	PDX	P	2.00	1.51	.25	Sa	
	SEC	P	2.00	1.51	.25	Sa	
Guantanamo, Cuba	MIA	P	.18	.13	.05	Twice Dly	
Guatemala City, Guatemala	MIA	P	.49	.39	.15	Dly	
	MSY	P	.54	.48	.15	Dly	
	HOU	P	.39	.28	.15	Twice Dly	
	BRO	P	.31	.19	.15	Dly	
	LAX	P	.47	.34	.15	Dly	
	MSY	TA	.54	.48	....	Dly	
	MEX	TA	.17	.13	....	M,T,W,Th,F	
Guayaquil, Ecuador	MIA	P	.60	.38	.15	11 Wkly	
	MSY	P	.71	.42	.15	Dly except Sa	
	HOU	P	.74	.45	.15	Dly except F	
	BRO	P	.74	.45	.15	Dly except F	
	CRP	P	.74	.45	.15	Dly except F	
	LAX	P	.87	.59	.30	Dly	
	BRO	B	.71	.46	.15	M,W,F,Sa	

Destination	Airport and Airline	RATES (See Note) 45 kg	100 kg	250 kg	500 kg	1000 kg	Depart
Guayaquil, Cont'd.	CHI	P*	.77	.67	.15	M,W,F,Sa	
	CRP	P*	.74	.65	.15	M,W,F,Sa	
	DAL	P*	.77	.67	.15	M,W,F,Sa	
	YIP	P*	.77	.67	.15	M,W,F,Sa	
	FTW	P*	.77	.67	.15	M,W,F,Sa	
	HOU	P*	.74	.65	.15	M,W,F,Sa	
	IND	P*	.74	.65	.15	M,W,F,Sa	
	LRD	P*	.74	.65	.15	M,W,F,Sa	
	MSY	P*	.71	.62	.15	M,W,F,Sa	
	SAT	P*	.74	.65	.15	M,W,F,Sa	
	HAV	P*	.60	.34	.15	M,W,F,Sa	
Haifa, Israel	IDL	S*	1.55	1.17	.25	T,Th,Sa	
	IDL	BO	1.55	1.17	.25	Dly	
Halifax, N. S.	BOS	T*	2.44	.6765	.10	Dly	
Hamburg, Germany	IDL	S	1.12	.84	.20	T,W,Th,Sa	
	IDL	BO	1.10	.83	.20	Dly	
	MIA	BO	1.13	.89	....	Dly	
	IDL	SR	1.10	.83	.20	Dly	
	IDL	K	1.10	.83	.20	Su,T,W,F	
	UL	K	1.15	.88	.25	W	
	BOS	P	1.10	.83	.20	.....	
	IDL	P	1.10	.83	.20	.....	
	IDL	AF	1.12	.83	.20	.....	
	BOS	AF	1.10	.83	.20	.....	
Hamilton, Bermuda	LGA	P	....	.15	.10	Dly	
	BOS	P	....	.15	.10	Dly	
	UL	P	1.40	280	.05***	W,F,Sa	
	YTO	P	1.40	280	.05***	W,F,Sa	
	LGA	C	.10	.10	.11	Dly	
Hapsiro, Br. Honduras	IDL	BO	1.47	1.41	.25	Dly	
Harmanni, Sweden	IDL	SR	1.20	.90	.20	Dly	
Havana, Cuba	MIA	P*	.08	.05	.05	Several Dly	
	LGA	P	.18	.14	.05	.....	
	CHI	CS	.18	.15	.15	Dly	
	CRP	CS	.18	.15	.15	Dly	
	HOU	CS	.18	.15	.15	Dly	
	MSY	CS	.14	.11	.15	Dly	
	STL	CS	.19	.17	.15	Dly	
	IND	CS	.19	.17	.15	Dly	
	BUJ	CS	.18	.16	.15	Dly	
	KLD	CS	.18	.16	.15	Dly	
	FTW	CS	.18	.16	.15	Dly	
	FWA	CS	.20	.18	.15	Dly	
	GRW	CS	.17	.15	.15	Dly	
	HOT	CS	.19	.20	.15	Dly	
	JAN	CS	.17	.15	.15	Dly	
	KIN	CS	.17	.15	.15	Dly	
	LIT	CS	.20	.18	.15	Dly	
	MEM	CS	.18	.16	.15	Dly	
	PTK	CS	.18	.16	.15	Dly	
	SHV	CS	.19	.17	.15	Dly	
	HUP	CS	.20	.18	.15	Dly	
	TOL	CS	.20	.18	.15	Dly	
	MKC	CS	.21	.18	.15	Dly	
	SPO	CS	.20	.18	.15	Dly	
	MIA	K	.08	.05	.05	Su,Th,Sa	
	IDL	LV	.18	.17	.15	Sa,W,F	
	MIA	LA*	.08	.05	.05	Dly	
	LGA	LA**	.18	.09	.15	Dly	
	MSY	N	.14	.11	.10	Dly	
	MIA	N	.08	.05	.10	Dly	
	TPA	N	.08	.05	.10	Dly	
	DCA	N	.16	.13	.10	Dly	
	IDL	N	.18	.16	.10	Dly	
	BAL	N	.16	.13	.10	Dly	
	CRP	N	.18	.16	.10	Dly	
	JAX	N	.11	.08	.10	Dly	
	[illegible]	N	.13	.10	.10	Dly	
	CRP	N	.18	.16	.10	Dly	
	SAV	N	.13	.09	.10	Dly	
	NEW	N	.18	.16	.10	Dly	
	PHL	N	.18	.16	.10	Dly	
	BRO	B	.21	.18	.15	Su,M,T,F,Sa	
	CHI	B*	.16	.15	.15	Su,M,T,F,Sa	
	CRP	B*	.16	.17	.15	Su,M,T,F,Sa	
	DAL	B*	.19	.16	.15	Su,M,T,F,Sa	
	FTW	B*	.19	.16	.15	Su,M,T,F,Sa	
	HOU	B*	.19	.16	.15	Su,M,T,F,Sa	
	LRD	B	.22	.19	.15	Su,M,T,F,Sa	
	SAT	B*	.20	.17	.15	Su,M,T,F,Sa	
	MIA	BO	.16	.11	....	Dly	
	IDL	AL	.16	.14	....	F	
Helsinki, Finland	IDL	SR	1.24	.93	.20	Dly	
	BOS	P	1.21	.91	.20	.....	
	IDL	P	1.24	.93	.20	.....	
	IDL	AF	1.24	.93	.20	.....	
	BOS	AF	1.21	.91	.20	.....	
Hermosillo, Mexico	LAX	P*	.15	.09	.05	Dly	
Holguin, Cuba	MIA	P*	.15	.09	.05	Dly	
Hong Kong, Br. Crn. Col.	LGA	P	2.26	1.77	.25	T	
	BOS	P	2.26	1.77	.25	Su,T,W,F	
	PDX	P	2.26	1.77	.25	Sa	
	SEA	P	2.26	1.77	.25	T	
	LAX	P	2.26	1.77	.25	M,T,Th,F,Sa	
	SFO	P	2.26	1.77	.25	M,T,Th,F,Sa	
	SFO	PH	2.26	1.77	.25	W,Sa	
	OAK	PH	2.26	1.77	.25	W,Sa	
	HNL	PH	2.26	1.80	.15	T,F	
	LGA	PH	2.26	1.77	.15	T,F	
	BOS	PH	2.26	1.77	.15	T,F	
	DEN	PH	2.26	1.77	.15	T,F	
	SLC	PH	2.26	1.77	.15	T,F	
	MKE	PH	2.26	1.77	.15	T,F	
	DCA	PH	2.26	1.77	.15	T,F	
	IDL	BO	2.26	1.79	.25	Dly	
	IDL	AF	2.29	1.79	.25	.....	
	BOS	AF	2.26	1.77	.25	.....	
	IDL	SR	2.29	1.79	.25	Su,T,W,Th,Sa	
	OAK	TR	2.26	1.77	.25	.....	

Destination	Airport and Airline	RATES (See Note) 45 kg	100 kg	250 kg	500 kg	1000 kg	Export
Honolulu, T. H.	LAX P	.71	.57	.15	Dly		
"	SFO P	.71	.57	.15	Tues Dly		
"	PDX P	.71	.57	.15	Th,Sa		
"	SEA P	.71	.57	.15	Th,Sa		
"	SFO P	.71	.57	.15	Dly		
"	CHI SW	.88	.71	.15	Tues Wkly		
"	CHI SW	.88	.71	.15	Tues Wkly		
"	CHI SW	.88	.71	.15	Tues Wkly		
"	CHI SW	.88	.71	.15	Tues Wkly		
"	MKE SW	.88	.71	.15	Tues Wkly		
"	MSN SW	.88	.71	.15	Tues Wkly		
"	LGA SW	.88	.71	.15	Tues Wkly		
"	PIT SW	.88	.71	.15	Tues Wkly		
"	BWI SW	.88	.71	.15	Tues Wkly		
"	BOS SW	.88	.71	.15	Tues Wkly		
"	CHI AA	.88	.71	.15	Tues Wkly		
"	CHI AA	.88	.71	.15	Tues Wkly		
"	CLE AA	.88	.71	.15	Tues Wkly		
"	YIP AA	.88	.71	.15	Dly		
"	IDL AA	.94	.76	.15	Dly		
"	VR EC	.72	.58	.15	M, Alt. Th&F		
Iguape Falls, Brazil	LGA P	1.70	1.70	.35	M		
"	MIA P	1.41	1.41	.35	M		
"	MSY P	1.41	1.41	.35	M		
"	BOG P	1.04	1.04	.35	M		
"	BRO P	1.04	1.04	.35	M		
"	LAX P	2.14	2.14	.35	Th		
Innsbruck, Austria	IDL S	1.21	.91	.30			
"	UL K	1.27	.95	.30			
Inverness, Scotland	MIA BO	1.15	.87	....	Sa,T,Sa		
Ipiales, Colombia	MIA P*	.68	.53	.15	Dly		
"	LGA P*	.74	.61	.15	Dly		
"	MSY P*	.74	.61	.15	Dly		
"	BOG P*	.74	.61	.15	Dly		
"	BRO P*	.74	.61	.15	Dly		
"	LAX P*	.87	.68	.30	Dly		
Irumu, Belgian Congo	IDL S	1.60	1.42	.30	T,W,Th,Sa		
Istanbul, Turkey	IDL K	1.54	1.16	.30	Th		
"	UL K	1.69	1.33	.30	W		
"	BOS P	1.51	1.13	.30			
"	IDL LI	1.48	1.15	.30			
"	BOS AF	1.51	1.11	.30			
"	IDL AF	1.51	1.13	.30			
"	IDL SR	1.54	1.16	.30	Su,T,W,Th,Sa		
"	IDL BO	1.54	1.16	.30	Dly		
"	MIA BO	1.51	1.14	....	Dly		
"	IDL SR	1.53	1.15	.30	Su,Th		
Ixiamas, Mexico	MIA P*	.81	.36	.15	Dly		
"	MSY P*	.68	.34	.15	Dly		
"	BOG P*	.68	.34	.15	Dly		
"	BRO P*	.68	.13	.15	Dly		
"	LAX P*	.98	.98	.15	Dly		
Jakarta, Java	IDL BO	2.41	1.81	.35	T,W,Th,F		
"	IDL K	2.41	1.81	.35	Dly except Sa		
"	UL K	2.59	1.94	.35	Su,W		
Jeddah, Saudi Arabia	IDL BO	1.71	1.28	.35	Dly		
Jerusalem, Israel (See Lydda, Israel)							
Jibuti, Fr. Somaliland	IDL BO	1.81	1.36	.35	Dly		
"	IDL AF	1.81	1.34	.35			
"	IDL AF	1.79	1.34	.35			
Jose Pinero (Colombia)	LGA P	1.47	....	.35	Su,Th,Sa		
"	MIA P	1.35	....	.35	Su,Th,Sa		
"	MSY P	1.49	....	.35	Su,Th,Sa		
"	BOG P	1.03	....	.35	W,F,Sa		
"	BRO P	1.03	....	.35	W,F,Sa		
"	MLD P	1.58	....	.35	W,F,Sa		
"	LAX P	1.82	....	.35	W,F,Sa		
Johannesburg, U. of So. Africa	IDL K	1.80	1.42	.35	T,F		
"	UL K	2.02	1.52	.35	Su,W		
"	LGA P	1.80	1.42	.35			
"	BOS P	1.80	1.42	.35			
"	IDL BO	1.89	1.42	.35	Dly		
"	IDL S	1.89	1.42	.35	T,W,Th,Sa		
Jos, Nigeria	IDL BO	1.54	1.16	.35	Dly		
Juba, Anglo-Egyptian Sudan	IDL S*	1.89	1.42	.35	T,W,Th,Sa		
Juneau, Alaska	SEA P	.32	.13	.15	Dly		
Kabalo, Belgian Congo	IDL S*	1.89	1.42	.35	T,W,Th,Sa		
Kaduna, Nigeria	IDL BO	1.54	1.16	.35	Dly		
Kamaran Isl., Rivers	IDL BO	1.81	1.36	.35	Su,M,T,Th,F		
Kampala, Uganda	IDL BO	1.89	1.42	.35	Su,M,T,Th,F		
Kano, Nigeria, B.W.A.	IDL BO	1.54	1.16	.35	Dly		
"	IDL AF	1.54	1.16	.35	Thurs Wkly		
"	BOS AF	1.51	1.14	.35	Thurs Wkly		
"	IDL K	1.54	1.16	.35	T,F		
"	UL K	1.69	1.28	.35	Su,W		
Karachi, Pakistan	LGA P	1.90	1.47	.35			
"	BOS P	1.92	1.48	.35			
"	LAX P	2.12	1.65	.35			
"	SFO P	2.22	1.66	.35			
"	LGA TW	1.90	1.47	.35			
"	IDL SR	1.90	1.47	.35	Su,T,W,Th,Sa		
"	IDL K	1.87	1.49	.35	Dly except Sa		
"	UL K	2.11	1.58	.35	Su,W		
"	IDL BO	1.96	1.47	.35	Dly		
"	IDL AF	1.92	1.47	.35			
"	BOS AF	1.68	1.45	.35			
Ketchikan, Alaska	SEA P	.32	.09	.15	Dly		

Destination	Airport and Airline	RATES (See Note) 45 kg	100 kg	250 kg	500 kg	1000 kg	Export
Kigoma, Anglo-Egypt. Sudan	IDL BO	1.76	1.34	.35	Dly		
"	IDL AF	1.76	1.34	.35	Thurs Wkly		
"	BOS AF	1.76	1.33	.35			
Kindu, Belg. Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa		
Kingston, Jamaica	MIA P*	.50	.38	.15	Tues Dly		
"	MIA K	.15	.10	.15	Su,M,T,Th,Sa		
"	BOG CS	.40	.30	.15	Dly		
"	CHI CS	.40	.30	.15	Dly		
"	YIP CS	.40	.30	.15	Dly		
"	BLD CS	.40	.30	.15	Dly		
"	HVV CS	.40	.30	.15	Dly		
"	FWA CS	.40	.30	.15	Dly		
"	GRW CS	.40	.30	.15	Dly		
"	SOT CS	.40	.30	.15	Dly		
"	HAV CS	.47	.35	.15	Dly		
"	HOU CS	.40	.30	.15	Dly		
"	JAN CS	.40	.30	.15	Dly		
"	LIT CS	.40	.30	.15	Dly		
"	MEM CS	.40	.30	.15	Dly		
"	MSY CS	.47	.35	.15	Dly		
"	PUK CS	.40	.30	.15	Dly		
"	STL CS	.40	.30	.15	Dly		
"	SHV CS	.40	.30	.15	Dly		
"	HUF CS	.40	.30	.15	Dly		
"	TOL CS	.40	.30	.15	Dly		
"	MKC CS	.40	.30	.15	Dly		
"	SGF CS	.40	.30	.15	Dly		
"	MIA BO	.53	.40	....	Dly		
"	UL T	.82C	.61C	.04**	M		
"	YTO T	.82C	.61C	.04**	M		
Kuwait, Kuwait	IDL BO	1.76	1.32	.35	Dly		
Kristiansand, Norway	IDL SR	1.13	.85	.30	Dly		
"	IDL K	1.13	.85	.30	Dly except Th		
"	UL K	1.13	.85	.30	Su,W		
La Ceiba, Honduras	MSY TA	.43	.35	....	M,W,F		
"	MEX TA	.30	.19	....	T,Th,Sa		
Lagos, Nigeria	IDL BO	1.54	1.16	.35	Dly		
"	IDL AF	1.54	1.16	.35	Thurs Wkly		
"	BOS AF	1.51	1.14	.35			
La Guaira, Venezuela	LGA P*	.60	.33	.30	Dly		
"	MIA P*	.45	.25	.30	Dly		
"	MSY P*	.45	.25	.30	Dly		
"	BOG P*	.45	.25	.30	Dly		
"	BRO P*	.45	.25	.30	Dly		
"	LAX P*	.68	.47	.30	Dly		
"	MIA K	.45	.25	.30	Dly except M		
"	IDL LI	.60	.33	.30	Dly except M		
"	BOG CS	.33	.25	.15	Dly		
"	CHI CS	.33	.25	.15	Dly		
"	YIP CS	.33	.25	.15	Dly		
"	ELD CS	.41	.34	.15	Dly		
"	HVV CS	.33	.25	.15	Dly		
"	FWA CS	.33	.25	.15	Dly		
"	GRW CS	.33	.25	.15	Dly		
"	SOT CS	.33	.25	.15	Dly		
"	HOU CS	.33	.25	.15	Dly		
"	IND CS	.41	.34	.15	Dly		
"	JAN CS	.33	.25	.15	Dly		
"	LIT CS	.41	.34	.15	Dly		
"	MEM CS	.33	.25	.15	Dly		
"	MSY CS	.33	.25	.15	Dly		
"	PUK CS	.33	.25	.15	Dly		
"	STL CS	.41	.34	.15	Dly		
"	SHV CS	.41	.34	.15	Dly		
"	HUF CS	.33	.25	.15	Dly		
"	TOL CS	.33	.25	.15	Dly		
"	MKC CS	.33	.25	.15	Dly		
"	SGF CS	.33	.25	.15	Dly		
"	HAV CS	.39	.29	.15	Dly		
"	KIN CS	.34	.27	.15	Dly		
La Paz, Bolivia	MIA P*	1.07	.81	.30	Dly except T		
"	MSY P*	1.13	.86	.30	Dly except T		
"	BOG P*	1.16	.89	.30	Dly except M		
"	BRO P*	1.16	.89	.30	Dly except M		
"	LAX P*	1.39	.92	.30	Dly except M		
"	CHI P*	1.19	.79	.15	T,Sa		
"	DAL P*	1.19	.79	.15	T,Sa		
"	HOU P*	1.19	.69	.15	M,T,Sa		
"	BRO P*	1.19	.69	.15	W,Sa		
"	CRP P*	1.19	.69	.15	W,Sa		
"	YIP P*	1.19	.79	.15	W,Sa		
"	FTW P*	1.19	.79	.15	W,Sa		
"	HAV P*	1.03	.57	.15	W,Sa		
"	IND P*	1.19	.89	.15	W,Sa		
"	LRD P*	1.17	.69	.15	W,Sa		
"	MSY P*	1.13	.69	.15	W,Sa		
"	SAT P*	1.13	.69	.15	W,Sa		
"	YIP U*	1.19	.79	.20	Sa,F		
Leopoldville, Belgian Congo	LGA P	.75	1.50	.35	M,Th		
"	BOS P	1.79	1.36	.35	Sa		
"	IDL S	1.72	1.30	.35	T,W,Th,Sa		
Lethbridge, Alb., Canada	LGA T	2.25*	.31	.10	Dly		
"	CTB W	.54	....	.10	Dly		
Libenge, Belgian Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa		
Lima, Peru	MIA P*	.87	.66	.30	Dly		
"	MSY P*	.98	.68	.30	Dly		
"	HOU P*	.98	.68	.30	Dly		
"	BRO P*	.98	.68	.30	Dly		
"	LAX P*	1.09	.79	.30	Dly		
"	HOU P*	.98	.87	.15	Su,M,W,F,Sa		
"	IND P*	.98	.87	.15	Su,M,W,F,Sa		

Destination	Airport and Airline	RATES (See Note) 45 kg	100 kg	250 kg	500 kg	1000 kg	Export
Lima, Peru, Cont'd.	LRD P	.97	.87	.15	Su,M,W,F,Sa		
"	MSY P*	.98	.68	.15	Su,M,W,F,Sa		
"	SAT P*	.98	.87	.15	Su,M,W,F,Sa		
"	BRO P*	.97	.87	.15	Su,M,W,F,Sa		
"	CRP P*	.98	.68	.15	Su,M,W,F,Sa		
"	DAL P*	.98	.68	.15	Su,M,W,F,Sa		
"	FTW P*	.98	.68	.15	Su,M,W,F,Sa		
"	HAV P*	.82	.65	.15	Su,M,W,F,Sa		
"	MIA BO	.74	.56	....	Dly		
Lincoln, Belgian Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa		
Lisbon, Portugal	LGA P	1.68	.77	.35	Su,M,F		
"	BOS P	.90	.74	.35	Su,M,F		
"	IDL S	1.11	.84	.30	T,Th,Sa		
"	IDL BO	1.68	.77	.35	Dly		
"	MIA BO	1.04	.78	.30	Dly		
"	IDL AF	1.12	.84	.30	Tues Wkly		
"	BOS AF	1.09	.82	.30			
"	LGA TW	1.68	.77	.35	M,W,F		
"	BOS TW	.90	.74	.35	W,F		
"	YIP TW	1.68	.78	.30	M,W,F		
"	CHI TW	1.04	.81	.30	M,W,F		
"	IDL K*	1.21	.91	.30	W,Sa		
"	UL K	1.27	.95	.30	W		
Liverpool, England	LGA TW*	.97	.73	.30	Dly		
"	BOS TW*	.94	.71	.30	M,W,F		
"	CHI TW*	1.02	.78	.30	F		
"	YIP TW*	.98	.74	.30	F		
"	PHL TW*	.98	.73	.30	F		
"	IDL K	.97	.72	.30	T		
"	IDL BO	.97	.72	.30	Dly		
"	MIA BO	1.09	.80	....	Dly		
Leopoldville, Belgian Congo	IDL S	1.96	1.42	.35	T,W,Th,Sa		
London, England	LGA P	1.68	.75	.30	Dly		
"	BOS P	.97	.73	.30	Dly		
"	LGA TW	1.68	.75	.30	Dly		
"	BOS TW*	.97	.73	.30	M,W,F		
"	CHI TW*	1.05	.80	.30	F		
"	YIP TW*	1.01	.77	.30	F		
"	PHL TW*	1.01	.76	.30	Sa		
"	IDL S	1.05	.79	.30	T,Th,Sa		
"	IDL SW	.97	.70	.30			
"	IDL BO	1.68	.75	.30	Dly		
"	MIA BO	.83	.62	....	Dly		
"	IDL SR	1.68	.75	.30	Dly		
"	IDL AF	1.68	.75	.30	Dly		
"	BOS AF	1.68	.75	.30	Dly		
"	IDL K*	1.68	.80	.30	Dly		
"	UL K	1.10	.80	.22	Su,W		
"	UL T	1.64C	.78C	.22**	Su,T,W,Th,Sa		
London, Ont., Canada	LGA T*	2.14	.0855	.10	Dly		
Luau, Sweden	IDL SR	1.34	.98	.30	Dly		
Luxemburg, Belgian Congo	IDL S	1.89	1.42	.35	T,W,Th,Sa		
Lusaka, Northern Rhodesia	IDL BO	1.89	1.42	.35	Su,M,T,Th,F		
Lydda, Israel	IDL SR	1.54	1.16	.35	Su,T,W,Th,Sa		
"	IDL EL	1.55	1.17	....			
"	CHI TW	1.89	1.21	.35	M,W,Sa		
"	YIP TW	1.54	1.17	.35	M,W,Sa		
"	BOS TW	1.54	1.14	.35	M,F		
"	PHL TW	1.55	1.17	.35	M,W,Sa		
"	IDL LI	1.55	1.17	.35	Su,W		
"	LGA TW	1.54	1.14	.35	M,W,Sa		
"	IDL AF	1.54	1.16	.35			
"	BOS AF	1.51	1.14	.35			
"	IDL K	1.54	1.16	.35	Su,T		
"	UL K	1.54	1.35	.35	W		
"	IDL S*	1.54	1.17	.35	T,W,Th,Sa		
"	IDL BO	1.54	1.16	.35	Dly		
"	IDL SR	1.55	1.17	.35	Su,W,F		
Lyon, France	IDL AF	1.10	.82	.30	Dly		
Macapa Brazil	BOS AF	1.67	.81	.30			
"	LGA P*	1.52	1.52	.35	M,W,Sa		
"	MIA P*	1.28	1.28	.35	M,W,Sa		
"	MSY P*	1.51	1.51	.35	M,W,Sa		
"	HOU P*	1.44	1.44	.35	Su,T,F		
"	BRO P*	1.56	1.56	.35	Su,T,F		
"	LAX P*	1.86	....	.35	Su,T,F		
Madras, India	IDL BO	2.14	1.62	.35	Dly		
Madrid, Spain	IDL BO	1.11	.82	.30	Dly		
"	IDL AF	1.11	.82	.30			
"	BOS AF	1.08	.81	.30			
"	LGA TW	1.68	.84	.30	M,W,F		
"	BOS TW	1.08	.82	.30	W,F		
"	CHI TW	1.16	.88	.30	M,W,F		
"	YIP TW	1.12	.85	.30	M,W,F		
"	IDL K*	1.11	.88	.30	Su,W		
"	UL K	1.16	.88	.22	W		
"	IDL S	1.11	.84	....	T,W,Th,Sa		
Malmo, Sweden	IDL SR	1.13	.86	.30	Dly		
Malta	IDL BO	1.20	.90	.35	Dly		
Managua, Nicaragua	MIA P*	.50	.24	.15	Dly		
"	MSY P*	.43	.23	.15	Dly		
"	HOU P*	.43	.23	.15	Dly		
"	BRO P*	.50	.24	.15	Dly		
"	MSY TA	.43	.33	....	Dly except Su		
"	MEX TA	.25	.16	....	M thru Sa		
Managua, Colombia	LAX P*	.55	.30	.15	Dly		
"	LGA EA	.51	.44	.30			
"	MIA EA	.44‡	.33‡	.30			
"	HAV EA	.33‡	.29‡	.15			
"	MIA P*	.50	.24	.15	Dly		
"	MSY P*	.43	.23	.15	Dly		
"	HOU P*	.43	.23	.15	Dly		
"	BRO P*	.50	.24	.15	Dly		
"	LAX P*	.55	.30	.15	Dly		

Destination	Airport and Airline	RATES (See Note) 45 kg 100 kg 250 kg 500 kg 1000 kg	Route	Days
Maseru, Brasil	LGA T*	1.44 1.44 .35		Dly except Su
"	MIA T*	1.34 1.34 .35		Dly except Su
"	MSY T*	1.43 1.43 .35		Dly except Su
"	HOU T*	1.43 1.43 .35		Dly except Su
"	BRO T*	1.54 1.54 .35		Dly except Su
"	LAX T*	1.79 1.79 .35		Dly except Su
Manchester, England	IDL K*	1.06 .86 .36		Sa,Th
"	UL K*	1.10 .88 .38		Sa,W
"	IDL SS	1.01 .78 .30		Dly
"	IDL AF	1.11 .94 .30		.....
"	BOS AF	1.08 .92 .30		.....
"	IDL S	1.03 .79 .29		T,Th,Sa
"	LGA TW*	.97 .73 .29		F
"	BOS TW*	.94 .71 .29		M,W,F
"	CHI TW*	1.03 .78 .29		F
"	YIP TW*	.98 .74 .29		F
"	PHL TW*	.98 .74 .29		Sa
"	IDL SO	.97 .73 .29		Dly
Manila, Philippines	LAX P	2.26 1.77 .35		T,Sa
"	SFO P	2.26 1.77 .35		T,Sa
"	PDX P	2.26 1.77 .35		Sa
"	SEA P	2.26 1.77 .35		Sa
"	LGA P	2.26 1.77 .35		T
"	BOS P	2.43 .02 .35		T
"	SFO PH	2.26 1.77 .35		W,Sa
"	OAK PH	2.26 1.77 .35		W,Sa
"	EUR PH	1.79 1.84 .35		W,Sa
"	LGA PH	2.26 1.77 .35		T,F
"	BOS PH	2.26 1.77 .35		T,F
"	DEN PH	2.26 1.77 .35		T,F
"	SLC PH	2.26 1.77 .35		T,F
"	CHI PH	2.26 1.77 .35		T,F
"	MKE PH	2.26 1.77 .35		T,F
"	DCA PH	2.26 1.77 .35		T,F
"	EDF NW	2.26 1.77 .35		Two Wkly
"	CHI NW	2.26 1.77 .35		Two Wkly
"	CLE NW	2.26 1.77 .35		Two Wkly
"	YIP NW	2.26 1.77 .35		Two Wkly
"	MKE NW	2.26 1.77 .35		Two Wkly
"	MPS NW	2.26 1.77 .35		Two Wkly
"	LGA NW	2.26 1.77 .35		Two Wkly
"	PIT NW	2.26 1.77 .35		Two Wkly
"	SEA NW	2.26 1.77 .35		Two Wkly
"	DCA NW	2.26 1.77 .35		Two Wkly
"	IDL AF	2.43 1.84 .35		.....
"	BOS AF	2.43 1.82 .35		.....
Maracaibo, Colombia	MIA T*	.44 .29 .15		Dly
"	LGA T*	.44 .27 .15		Dly
"	MSY T*	.40 .25 .15		Dly
"	HOU T*	.40 .25 .15		Dly
"	BRO T*	.46 .28 .15		Dly
"	LAX T*	.74 .52 .15		Dly
Maseru, Belgian Congo	IDL S	1.89 1.40 .35		T,W,Th,Sa
Manta, Ecuador	MIA T*	.68 .55 .15		M,T,W,Sa
"	MSY T*	.71 .62 .15		M,T,W,Sa
"	HOU T*	.74 .55 .15		Sa,M,W,F
"	BRO T*	.74 .56 .15		Sa,M,W,F
"	LAX T*	.87 .59 .39		Sa,M,W,F
Manzanillo, Cuba	MIA T*	.16 .09 .06		Dly
Maracaibo, Venezuela	MIA T*	.40 .32 .15		Dly
"	LGA T*	.50 .31 .15		Dly
"	MSY T*	.45 .28 .15		Dly
"	HOU T*	.45 .28 .15		Dly
"	BRO T*	.45 .28 .15		Dly
"	LAX T*	.68 .48 .15		Dly
"	MIA K	.40 .32 .15		Dly
"	UL K	.50 .34 .22		M,F
Marseille, France	IDL AF	1.13 .85 .30		Dly
"	BOS AF	1.10 .83 .15		Dly
"	LGA P	1.14 .86 .30		.....
"	BOS P	1.12 .84 .30		.....
Matadi, Belgian Congo	IDL S	1.82 1.39 .35		T,W,Th,Sa
Mauritius	IDL AF	2.46 1.85 .35		Weekly
"	BOS AF	2.43 1.83 .35		.....
Mayaguez, Cuba	MIA T*	.15 .09 .05		Dly
Mazatlan, Mexico	HOU T*	.28 .21 .15		Dly
"	BRO T*	.28 .17 .15		Dly
"	LAX T*	.30 .25 .15		Dly
"	MEX L	.15 .11		Dly
Medan, Sumatra	IDL BO	2.41 1.81 .35		T,W,Th,F
"	IDL K	2.41 1.81 .35		Dly except Sa
Medellin, Colombia	MIA T*	.51 .35 .15		Dly
"	LGA T*	.51 .35 .15		Sa,Th
"	MSY T*	.47 .32 .15		Dly
"	HOU T*	.47 .32 .15		Dly
"	BRO T*	.47 .32 .15		Dly
"	LAX T*	.75 .50 .15		Dly
Merida, Mexico	MIA T*	.20 .12 .15		Dly
"	MSY T*	.22 .11 .15		Dly
"	HOU T*	.22 .22 .15		Dly
"	BRO T*	.20 .15 .15		Dly
"	LAX T*	.40 .32 .15		Dly
"	DAL S	.16		Dly
"	FTW S	.16		Dly
"	LRD S	.16		Dly
"	SAT S	.16		Dly
Mazatlan, Mexico	LAX T*	.56 .35 .15		Dly
Mexico City, Mexico	MIA T*	.61 .22 .15		Dly
"	MSY T*	.56 .21 .15		Dly
"	HOU T*	.56 .18 .12		Dly
"	BRO T*	.54 .20 .15		Dly

Destination	Airport and Airline	RATES (See Note) 45 kg 100 kg 250 kg 500 kg 1000 kg	Route	Days
Mexico City, Cont'd	LAX T*	.80 .35 .15		Dly
"	MSY TA	.81 .30		Dly
"	DAL A	.30 .14 .10		Dly
"	LAX A	.30 .14 .10		Dly
"	SAT A	.30 .14 .10		Dly
"	ELP A	.30 .14		Dly
Midway Island	LAX P	1.15 .91 .30		M,T,W,F
"	SFO P	1.15 .91 .30		M,T,W,F
"	PDX P	1.15 .91 .30		.....
"	SEA P	1.15 .91 .30		.....
Milan, Italy	IDL LI	1.21 .91 .35		Dly
"	IDL AF	1.32 .92 .30		.....
"	BOS AF	1.15 .90 .30		.....
"	IDL SW	1.06 .83 .30		.....
"	IDL S	1.29 .91 .30		T,W,Th,Sa
"	LGA TR	1.06 .85 .15		.....
"	IDL SS	1.24 .93 .30		Sa,T,W,Th,Sa
"	IDL SO	1.22 .92 .30		Dly
"	IDL K*	1.22 .92 .30		M,T,F
"	UL K*	1.26 .95 .32		Sa,W
"	LGA TW	1.22 .92 .30		Dly except T
"	BOS TW	1.19 .89 .30		Sa
"	CHI TW	1.26 .95 .30		Dly except T
"	YIP TW	1.22 .92 .30		Dly except T
"	PHL TW	1.22 .92 .30		Dly except T
Minatitlan, Mexico	MIA T*	.27 .19 .15		Dly
"	MSY T*	.21 .17 .15		Dly
"	HOU T*	.23 .18 .15		Dly
"	BRO T*	.21 .12 .15		Dly
"	LAX T*	.37 .25 .15		Dly
Mogadishu, Italian Somaliland	IDL BO	1.80 1.42 .35		Dly
Montego Bay, Jamaica	MIA T*	.18 .09 .05		T,Sa
"	MIA BO	.10 .06		Dly
Monteria, Colombia	MIA T*	.51 .36 .15		Dly
"	LGA T*	.61 .45 .15		Sa,Th
"	HOU T*	.50 .35 .15		Dly
"	BRO T*	.50 .35 .15		Dly
"	LAX T*	.74 .50 .15		Dly
Monterrey, Mexico	DAL A	.15 .09 .10		Dly
"	ELP A	.15 .09 .10		Dly
"	LAX A	.30 .17 .10		Dly
"	SAT A	.09 .06 .10		Dly
"	MLD F	....		Dly
Montevideo, Uruguay	LGA T*	1.80 .80 .35		Dly
"	MIA T*	1.45 .80 .35		Dly
"	MSY T*	1.50 .87 .35		Dly
"	HOU T*	1.52 .80 .35		Dly
"	BRO T*	1.52 .80 .35		Dly
"	LAX T*	1.97 1.34 .35		Dly
Montreal, Que., Canada	LGA C	.05		Dly
"	LGA T*	2.00 .0665 .10		Dly
"	CHI T*	2.00 .1135 .10		Dly
"	CLE T*	2.00 .095 .10		Dly
"	CHI TA	2.00 .1135 .10		Dly
"	CLE TA	2.00 .095 .10		Dly
"	LGA NE*	2.00 .... .10		Dly
"	BOS NE*	1.80 .... .10		Dly
Monywa, Brasil	LGA P	1.41 .... .15		T,F
"	MIA P	1.34 .... .15		T,F
"	MSY P	1.40 .... .15		T,F
"	HOU P	1.41 .... .15		M,Th
"	BRO P	1.52 .... .15		M,Th
"	LAX P	1.75 .... .15		M,Th
"	NLD P	1.54 .... .15		M,Th
Melbourne, France	IDL AF	1.12 .85 .30		.....
"	BOS AF	1.10 .83 .30		.....
Munich, Germany	LGA P	1.16 .87 .35		.....
"	BOS P	1.13 .85 .35		.....
"	IDL SS	1.16 .87 .30		Dly
"	IDL S	1.18 .89 .30		T,W,Th,Sa
"	IDL AF	1.18 .87 .30		.....
"	BOS AF	1.14 .86 .30		.....
"	IDL K*	1.17 .87 .30		T,Th,F
"	UL K	1.21 .91 .32		Sa
"	IDL SO	1.18 .89 .30		Dly
"	MIA SO	1.22 .92 .30		Dly
"	IDL SR	1.18 .89 .30		Sa,Th
Nairobi, Kenya	IDL BO	1.88 1.42 .35		Dly
"	IDL AF	1.89 1.42 .35		.....
"	BOS AF	1.86 1.40 .35		.....
"	IDL S	1.89 1.42 .35		Sa,T,Th,Sa
"	IDL SS	1.89 1.42 .35		Sa,T,W,Th,Sa
Nandi, Fiji	SFO BC	1.68 1.26 .35		M,Th,F
"	HNL BC	.79 .73 .35		M-Th,F
"	VR BC	1.60 1.20 .35		M & Alt. Th,F
Naples, Italy	IDL LI	1.23 .97 .35		Dly
"	IDL S	1.30 .97 .35		T,W,Th,Sa
Nassau, Bahamas	MIA T*	.27 .24 .15		Dly
"	UL T*	.32 .21 .15		Sa,M,W,Sa
"	YTO T*	.31 .19 .15		Sa,M,W,Sa
Natal, Brasil	LGA T*	1.42 1.42 .35		Sa,Th,Sa
"	MIA T*	1.32 1.32 .35		Sa,Th,Sa
"	MSY T*	1.42 1.42 .35		Sa,Th,Sa
"	HOU T*	1.42 1.42 .35		W,F,Sa
"	BRO T*	1.54 1.54 .35		W,F,Sa
"	LAX T*	1.80 1.80 .35		W,F,Sa

Destination	Airport and Airline	RATES (See Note) 45 kg 100 kg 250 kg 500 kg 1000 kg	Route	Days
N'Dola, Rhodesia	IDL S	1.49 1.42 .35		T,W,Th,Sa
"	IDL BO	1.50 1.42 .35		Dly
Nanpay, Ft. W. Al.	IDL AF	2.25 1.70 .15		Weekly
"	BOS AF	2.28 1.67 .15		Weekly
Nice, France	IDL S	1.15 .87 .30		T,W,Th,Sa
"	IDL SS	1.15 .89 .30		Sa,T,W,Th,Sa
"	IDL AF	1.16 .87 .30		Dly
"	BOS AF	1.16 .85 .30		Dly
"	LGA P	1.16 .87 .30		Sa,F
"	BOS P	1.19 .84 .30		Sa,F
"	IDL SO	1.16 .87 .30		Dly
"	IDL K*	1.16 .87 .30		M,T,Sa
"	UL K	1.21 .91 .32		Sa
"	IDL SR	1.15 .87 .30		Sa,Th
Nicosia, Cyprus	IDL BO	1.49 1.12 .35		Sa
Nogales, Son., Mex.	MEX L	.18 .15		Dly
Nome, Alaska	SEA P	.55 .35 .15		Sa,W
Norrkoping, Sweden	IDL SS	1.17 .89 .30		Dly
North Bay, Ont., Canada	LGA T*	2.10 .0735 .10		Dly
Noumea, New Caledonia	LAX P	1.77 1.33 .35		Sa,Th
"	SFO P	1.77 1.33 .34		M,Th
"	PDX P	1.77 1.33 .35		Th
"	SEA P	1.77 1.33 .35		Th
"	IDL AF	2.14 1.54 .30		.....
"	BOS AF	2.11 1.54 .30		.....
Nuevo Gerona (Isle of Pines), Cuba	MIA EA	.14		Dly
Nuevo Guaymas, Son.	MSY TA	.47 .30		M,W,F
"	MEX TA	.37 .21		T,Th,Sa
Nuremberg, Germany	IDL K*	1.16 .87 .30		F
"	UL K	1.18 .92 .32		Sa
"	IDL S	1.16 .92 .30		Sa
"	IDL AF	1.16 .87 .30		.....
"	BOS AF	1.12 .86 .30		.....
Nuevo, Mexico	MIA T*	.31 .25 .15		Dly
"	MSY T*	.43 .25 .15		Dly
"	HOU T*	.31 .15 .15		Dly
"	BRO T*	.19 .12 .15		Dly
"	LAX T*	.33 .26 .15		Dly
Oaxaca, Mexico	MIA T*	.51 .35 .15		Dly
"	MSY T*	.43 .25 .15		Dly
"	HOU T*	.31 .15 .15		Dly
"	BRO T*	.19 .12 .15		Dly
"	LAX T*	.33 .26 .15		Dly
Odessa	EDF NW	2.26 1.77 .35		Two Wkly
"	CHI NW	2.26 1.77 .35		Two Wkly
"	CLE NW	2.26 1.77 .35		Two Wkly
"	YIP NW	2.26 1.77 .35		Two Wkly
"	MKE NW	2.26 1.77 .35		Two Wkly
"	MPS NW	2.26 1.77 .35		Two Wkly
"	LGA NW	2.26 1.77 .35		Two Wkly
"	PIT NW	2.26 1.77 .35		Two Wkly
"	SEA NW	2.26 1.77 .35		Two Wkly
"	DCA NW	2.26 1.77 .35		Two Wkly
"	LAX P	2.26 1.77 .35		T,F
"	SFO P	2.26 1.77 .35		T,F
"	PDX P	2.26 1.77 .35		T,F
"	SEA P	2.26 1.77 .35		T,F
"	OAK TR	1.53 1.40		.....
"	SFO PH	2.26 1.77 .35		W,Sa
"	OAK PH	2.26 1.77 .35		W,Sa
"	LAX PH	2.26 1.77 .35		T,F
"	PDX PH	2.26 1.77 .35		T,F
"	SEA PH	2.26 1.77 .35		T,F
"	LGA PH	2.26 1.77 .35		T,F
"	BOS PH	2.26 1.77 .35		T,F
"	DEN PH	2.26 1.77 .35		T,F
"	SLC PH	2.26 1.77 .35		T,F
"	CLE PH	2.26 1.77 .35		T,F
"	YIP PH	2.26 1.77 .35		T,F
"	CHI PH	2.26 1.77 .35		T,F
"	MKE PH	2.26 1.77 .35		T,F
"	DCA PH	2.26 1.77 .35		T,F
Oran, Algeria	IDL AF	1.26 .95 .35		Six Wkly
"	BOS AF	1.23 .93 .35		.....
Oruro, Bolivia	MIA P*	1.10 .89 .30		Su,M,W,F,Sa
"	MSY P*	1.16 .88 .35		Su,M,W,F,Sa
"	HOU P*	1.19 .89 .30		Su,T,Th,F
"	BRO P*	1.19 .89 .30		Su,T,Th,F
"	LAX P*	1.33 .83 .30		Su,T,Th,F
Oslo, Norway	IDL SS	1.13 .85 .30		Dly
"	IDL S	1.13 .84 .30		T,W,Th,Sa
"	IDL SO	1.13 .85 .30		Dly
"	MIA SO	1.24 .91		Dly
"	IDL AF	1.17 .86 .30		Six Wkly
"	BOS AF	1.14 .86 .30		.....
"	IDL K*	1.13 .85 .30		W,F,Sa
"	UL K	1.18 .89 .32		W
"	BOS P	1.10 .82 .30		.....
"	IDL P	1.13 .84 .30		.....

Destination	Airport and Airline	RATES (See Note) 45 kg 100 lbs	250 lbs	500 lbs	1000 lbs	Export
Ottawa, Ont., Canada	LGA C	.67				Dly
"	LGA T*	2.10	.0665	.10		Dly
Palmerston, N.Z.	IDL BO	2.40	1.80	.35		Dly
"	IDL K	2.40	1.80	.35		Tu,Th,F
"	UL K	2.28	1.94	.35		Sa,W
Palermo, Italy	IDL LI	1.34	.95	....		Dly
Panama City, Panama	MIA P*	.30	.25	.15		Dly
"	MSY P*	.30	.25	.15		Dly
"	HOU P*	.30	.25	.15		Dly
"	BRO P*	.30	.25	.15		Dly
"	LAX P*	.30	.25	.15		Dly
"	HOU P*	.30	.25	.15		Sa,M,W,F,Sa
"	CHI P*	.30	.25	.15		Sa,M,W,F,Sa
"	CRP P*	.30	.25	.15		Sa,M,W,F,Sa
"	DAL P*	.31	.31	.15		Sa,M,W,F,Sa
"	YIP P*	.31	.31	.15		Sa,M,W,F,Sa
"	MSY P*	.30	.25	.15		Sa,M,W,F,Sa
"	MSY TA*	.64	.64	....		M,W,F
"	MEX TA	.28	.28	....		T,Th,Sa
"	MIA K	.28	.28	.15		Sa,F
"	UL K	.28	.28	.17		F
"	MIA BO	.28	.27	....		Dly
Pantelleria, Italy	IDL LI	1.34	.96	.36		M,W,F
Paramaribo, Surinam	LGA T	.28	.28	.16		M,Th
"	MIA T	.28	.28	.16		M,Th
"	MSY T	.28	.28	.16		M,Th
"	HOU T	.28	.28	.16		M,Th
"	BRO T	.28	.28	.16		M,Th
"	LAX T	.28	.28	.16		M,W,Sa
"	UL K	.78	.48	.17		F
Paris, France	IDL S	1.08	.79	.30		T,W,Th,Sa
"	IDL SW	.81	.74	.30		....
"	IDL BO	1.08	.80	.30		Dly
"	MIA BO	1.11	.84	.34		....
"	IDL SE	1.08	.80	.30		Sa,T,W,Th,Sa
"	IDL AF	1.08	.80	.30		Dly
"	BOS AF	1.08	.79	.30		....
"	IDL SU	1.08	.80	.30		Dly ex. M,Th
"	UL K	1.10	.80	.30		Sa,W
"	LGA TW	1.08	.80	.30		14 Wkly
"	BOS TW	1.08	.79	.30		M,Sa
"	PHL TW	1.07	.81	.30		T
"	YIP TW	1.07	.81	.30		Dly
"	CHI TW	1.11	.84	.30		Dly
"	IDL T*	1.12	.82	.30		Dly
"	BOS T*	1.02	.79	.30		Sa,T,W,F
Pernambuco, Brazil	LGA P	.98	.48	.18		T,Th,Sa
"	MIA P	.98	.48	.18		T,Th,Sa
"	MSY P	.98	.48	.18		T,Th,Sa
"	HOU P	.98	.48	.18		M,W,F
"	BRO P	.98	.48	.18		M,W,F
"	LAX P	1.13	.72	.18		M,W,F
Perral, Chih., Mex.	MEX L	.11	.09	....		Dly
Pereira, Colombia	MIA P*	.64	.38	.15		Dly
"	LGA P*	.66	.37	.15		Dly
"	MSY P*	.69	.39	.14		Dly
"	HOU P*	.69	.39	.15		Dly
"	BRO P*	.69	.39	.15		Dly
"	LAX P*	.76	.52	.15		Dly
Pisa, Italy	IDL SW	1.08	.80	.30		....
Pointe-a-Pitre, Guad.	LGA P	.35	.25	.15		....
Popayan, Colombia	MIA P*	.62	.39	.15		Dly
"	LGA P*	.71	.39	.15		Dly
"	MSY P*	.67	.37	.15		Dly
"	HOU P*	.70	.40	.15		Dly
"	BRO P*	.70	.40	.15		Dly
"	LAX P*	.82	.54	.20		Dly
Port au Prince, Haiti	MIA P*	.12	.12	.15		Dly
"	LGA P*	.35	.31	.15		Dly
"	MIA K	.15	.12	.15		Th
Port Elizabeth, U. of S. Afr.	IDL BO	2.60	1.87	.35		....
Port of Spain, Trinidad	LGA P*	.45	.30	.15		Dly
"	MIA P*	.58	.34	.15		Dly
"	MSY P*	.46	.31	.15		Dly
"	HOU P*	.46	.34	.15		Dly
"	BRO P*	.46	.34	.15		Dly
"	LAX P*	.62	.43	.15		Dly

Destination	Airport and Airline	RATES (See Note) 45 kg 100 lbs	250 lbs	500 lbs	1000 lbs	Export
Port of Spain, Cont'd	MIA K	.30	.24	.15		M,W,F
"	UL K	.30	.30	.17		M,W,F,Sa
"	TTO T	.30	.30	.17		M,W,F,Sa
Port Sudan, Anglo-Egyptian	IDL BO	1.71	1.39	.56		Dly
Porto Alegre, Brazil	LGA P	1.03	.46	.18		Dly
"	MIA P	1.03	.46	.18		Dly
"	MSY P	1.03	1.00	.18		Dly
"	HOU P	1.03	1.11	.18		Dly
"	BRO P	1.03	1.03	.18		Dly
"	LAX P	2.15	2.15	.30		Dly
Prague, Czechoslovakia	IDL S	1.10	.80	.30		T,W,Th,Sa
"	IDL SW	1.08	.80	.30		....
"	IDL BO	1.15	.80	.30		Dly
"	MIA BO	1.20	.85	....		Dly
"	IDL SE	1.10	.80	.30		Sa,T,W,Th,Sa
"	IDL AF	1.10	.80	.30		Dly except W
"	BOS AF	1.10	.80	.30		Dly except W
"	IDL SU*	1.10	.80	.30		W,F
"	UL K	1.10	.80	.30		W
"	IDL SE	1.10	.80	.30		Sa,Th
Preston, Cuba	MIA P*	.30	.10	.05		Dly
Prestwick, Scotland	IDL SU	.84	.71	.30		Dly
"	UL T	.80C	.78C	.30C		Dly
"	IDL K	.84	.71	.30		M,T,W,F,Sa
Pueblo, Puebla	DAL B	.41	....	.17		Dly
"	FTW B	.41	....	.17		Dly
"	LRD B	.37	....	.17		Dly
"	SAT B	.34	....	.17		Dly
Puerto Cabezas, Nic.	MSY TA	.80	.67	....		M,W,F
"	MEX TA	.43	.38	....		T,Th,Sa
Puerto Cortes, Honduras	MSY TA	.42	.34	....		M,W,F
"	MEX TA	.33	.14	....		T,Th,Sa
Puerto Suarez, Bolivia	MIA P	1.11	.93	.35		M,W,Sa
"	MSY P	1.23	.93	.35		M,W,Sa
"	BRO P	1.26	.73	.35		Sa,T,F
"	LAX P	1.29	.87	.35		Sa,T,F
"	HOU P	1.26	.73	.35		Sa,T,F
Quito, Ecuador	MIA P	.64	.34	.15		Dly except Sa
"	MSY P	.70	.41	.15		Dly except F
"	HOU P	.73	.44	.15		Dly except Th
"	BRO P	.73	.44	.15		Dly except Th
"	LAX P	.86	.48	.30		Dly except Th
Rangoon, Burma	IDL BO	2.19	1.65	.55		Dly
Recife (Pernambuco), Brazil	LGA P	1.48	1.48	.33		Dly except F
"	MIA P	1.16	.75	.33		Dly except F
"	MSY P	1.30	1.30	.33		Dly except F
"	HOU P	1.44	1.44	.33		Dly except Th
"	BRO P	1.33	1.33	.33		Dly except Th
"	LAX P	1.34	1.34	.33		Dly except Th
Reggio Calabria, Italy	IDL LI	1.34	.96	.35		Dly except Su
Regina, Sask., Canada	LGA T*	7.00	.35	.10		Dly
Reunion Island	IDL AF	2.43	1.83	.35		Weekly
"	BOS AF	2.40	1.81	.35		Weekly
Reykjavik, Iceland	BOS P	.35	.35	.35		....
	IDL P	.75	.55	.35		....
Rio de Janeiro, Brazil	LGA P	1.37	.84	.35		Dly
"	MIA P	1.38	.88	.35		Dly
"	MSY P	1.44	.91	.35		Dly
"	HOU P	1.69	1.69	.35		Dly
"	BRO P	1.60	.96	.35		Dly
"	LAX P	1.94	1.94	.35		Dly
"	EWR TC	1.35	.84	....		Frequently
"	DAL B	1.62	.93	.15		M,W,F
"	HOU B	1.72	1.04	.15		M,W,F
"	BRO B	1.67	.96	.15		M,W,F
"	CHI B	1.70	.98	.15		M,W,F
"	CRP B	1.70	.98	.15		M,W,F
"	YIP B	1.62	.93	.15		M,W,F
"	FTW B	1.62	.93	.15		M,W,F
"	IND B	1.62	.93	.15		M,W,F
"	LRD B	1.62	.93	.15		M,W,F
"	MSY B	1.56	.93	.15		M,W,F
"	SAT B	1.62	.93	.15		M,W,F
"	HAV B	1.32	.93	.15		M,W,F
"	IDL AL	1.62	.93	....		....
"	YIP U*	1.62	.93	.35		Sa,Th
Roberts Field, Liberia	IDL AF	1.98	1.35	.35		Thrice Wkly
"	BOS AF	1.77	1.33	.35		Thrice Wkly
"	LGA P	1.81	1.13	.35		M,Th
"	BOS P	1.34	1.16	.35		Sa
Robore, Bolivia	MIA P	1.16	.93	.35		M
"	MSY P	1.32	.70	.35		M
"	HOU P	1.35	.72	.35		M
"	BRO P	1.26	.72	.35		M
"	LAX P	1.26	.92	.35		M

Destination	Airport and Airline	RATES (See Note) 45 kg 100 lbs	250 lbs	500 lbs	1000 lbs	Export
Rosario, Denmark	IDL SU	1.14	.87	.30		Dly
Rome, Italy	IDL S	1.27	.88	.35		T,W,Th,Sa
"	IDL LI	1.27	.95	....		F
"	IDL SW	1.13	.88	.30		....
"	IDL BO	1.27	.96	.35		Dly
"	MIA BO	1.30	.98	....		Dly
"	IDL SE	1.27	.90	.35		Sa,T,W,Th,Sa
"	IDL AF	1.27	.96	.35		Dly
"	BOS AF	1.26	.94	.35		Dly
"	IDL SU*	1.27	.96	.35		Sa,T,F
"	UL K	1.30	1.05	.35		Sa
"	LGA TW	1.27	.96	.35		14 Wkly
"	BOS TW	1.26	.93	.35		M,W,F,Sa
"	PHL TW	1.28	.97	.35		Dly
"	YIP TW	1.28	.97	.35		Dly
"	CHI TW	1.31	1.00	.35		Dly
"	IDL SE	1.27	.96	.35		Sa,W,F
"	LGA P	1.27	.96	.35		M,Th
"	BOS P	1.24	.93	.35		M,Th
Saigon, Indo China	IDL AF	2.22	1.74	.15		Twice Wkly
"	BOS AF	2.29	1.72	.15		Twice Wkly
"	IDL BO	2.22	1.74	.58		....
St. Croix, Virg. Is.	LGA P	.27	.21	.15		Th,Sa
"	MIA P	.28	.21	.15		Th,Sa
St. John, N. B.	BOS T*	2.14	.0563	.10		Dly
St. John, Antigua, B.W.I.	LGA P	.24	.24	.15		W,Th,Sa
"	MIA P	.25	.24	.15		W,Th,Sa
St. John, N. F.	BOS T	4.99	.1295	....		Dly
St. Lucia, B.W.I.	LGA P	.25	.27	.15		Th,Sa
"	MIA P	.25	.21	.15		Th,Sa
St. Thomas, Virgin Is. (U. S.)	LGA P	.26	.21	.15		Th,Sa
"	MIA P	.19	.15	.15		Th,Sa
Salisbury, So. Rhod.	IDL BO	1.80	1.43	.35		Dly
Salta, Argentina	MIA P	1.24	.88	.35		Sa
"	MSY P	1.30	.78	.35		F
"	HOU P	1.30	.78	.35		Th
"	BRO P	1.33	.78	.35		Th
"	LAX P	1.46	.92	.35		Th
San Ignacio de Velasco, Bolivia	MIA P	1.16	.93	.35		M,F
"	MSY P	1.32	.70	.35		M,F
"	HOU P	1.35	.72	.35		M,F
"	BRO P	1.26	.72	.35		M,F
"	LAX P	1.26	.92	.35		M,F
San Jose, Bolivia	MIA P	1.16	.93	.35		M,F
"	MSY P	1.32	.70	.35		M,F
"	HOU P	1.35	.72	.35		M,F
"	BRO P	1.26	.72	.35		M,F
"	LAX P	1.26	.92	.35		M,F
San Jose, Costa Rica	MIA P	.46	.31	.15		Dly
"	MSY P	.46	.26	.15		Dly
"	HOU P	.46	.26	.15		Dly
"	BRO P	.46	.26	.15		Dly
"	LAX P	.61	.43	.15		Dly
"	MSY TA	.43	.26	....		Dly except Sa
"	MEX TA	.31	.20	....		Dly except Su
"	UL K	.50	.45	.17		....
San Juan, Puerto Rico	LGA P	.22	.15	.05		Five Dly
"	MIA P	.15	.12	.05		Twice Dly
"	CHI P*	.39	2430	.15		Dly
"	YIP P*	.39	2430	.15		Dly
"	LGA P*	.35	2035	.05		Dly
"	MIA P*	.15	1200	.05		Dly
San Luis Potosi, S.L.P., Mexico	MEX L	.04	.03	....		Dly
San Salvador, El Salvador	MIA P	.42	.31	.15		Dly
"	MSY P	.38	.19	.15		Dly
"	HOU P	.38	.19	.15		Dly
"	BRO P	.38	.19	.15		Dly
"	LAX P	.38	.33	.15		Dly
"	MSY TA	.38	.19	....		Dly
"	MEX TA	.28	.13	....		Dly
Santa Clara, Cuba	MIA P*	.13	.09	.05		Dly
Santa Cruz, Bolivia	MIA P	1.16	.93	.35		M,W,F,Sa
"	MSY P	1.32	.70	.35		M,W,F,Sa
"	HOU P	1.35	.72	.35		Sa,T,Th,F
"	BRO P	1.26	.72	.35		Sa,T,Th,F
"	LAX P	1.37	.90	.35		Sa,T,Th,F

Destination	Airport and Airline	Rates (See Note)					Depart
		45 kg	100 kg	250 kg	500 kg	1000 kg	
Santa Maria, Azores	LGA	P	.70	.59	.50	.50	Su,M,Th,F
	BOS	P	.70	.57	.55	.55	Su,F
	MIA	BO	.90	.70	...	...	Dly
Santa Maria, Colombia	MIA	P*	.66	.58	.55	.55	Dly
	LGA	P*	.66	.58	.55	.55	Dly
	MSY	P*	.66	.58	.55	.55	Dly
	HOU	P*	.66	.58	.55	.55	Dly
	BRO	P*	.66	.58	.55	.55	Dly
	LAX	P*	.66	.67	.55	.55	Dly
Santiago, Chile	MIA	P*	1.20	.73	.55	.55	Dly
	MSY	P*	1.37	.79	.55	.55	Dly
	HOU	P*	1.40	.83	.55	.55	Dly
	BRO	P*	1.40	.83	.55	.55	Dly
	LAX	P*	1.40	.90	.55	.55	Dly
	MIA	BO	1.80	.70	...	...	Dly
Santiago, Cuba	MIA	P	.55	.50	.55	.55	Four Dly
Sao Luis, Brazil	LGA	P*	1.60	.72	.50	.50	Su,T,Th,Sa
	MIA	P*	1.58	1.15	.50	.50	Su,T,Th,Sa
	MSY	P*	1.58	1.58	.50	.50	Su,T,Th,Sa
	HOU	P*	1.61	1.61	.50	.50	M,W,F,Sa
	BRO	P*	1.61	1.61	.50	.50	M,W,F,Sa
	LAX	P*	1.60	1.62	.50	.50	M,W,F,Sa
Sao Paulo, Brazil	LGA	P*	1.42	.96	.55	.55	Dly
	MIA	P*	1.33	.93	.55	.55	Dly
	MSY	P*	1.65	.94	.55	.55	Dly
	HOU	P*	1.73	1.15	.55	.55	Dly
	BRO	P*	1.57	.96	.55	.55	Dly
	LAX	P*	1.60	1.05	.55	.55	Dly
	SWR	TC	1.60	.55	...	...	Frequently
Sao Salvador, Brazil	LGA	P*	1.55	1.58	.55	.55	Dly except F
	MIA	P*	1.38	1.38	.55	.55	Dly except F
	MSY	P*	1.54	1.54	.55	.55	Dly except F
	HOU	P*	1.72	1.72	.55	.55	Dly except Th
	BRO	P*	1.54	1.54	.55	.55	Dly except Th
	LAX	P*	1.54	1.54	.55	.55	Dly except Th
Shanghai	IDL	AF	2.22	1.90	.55	...	.....
	BOS	AF	2.40	1.57	.55	...	.....
Sharjah, Kuw	LGA	P	.91	.66	.50	.50	Dly
	BOS	P	.93	.66	.50	.50	Dly
	IDL	SW	.77	.61	.50	...	.....
	UL	T	.93C	.66C	.22**	T	
	IDL	BO	.91	.66	.50	.50	Th
	LGA	TW	.91	.66	.50	.50	Dly except T
	MSY	TW	.98	.66	.50	.50	M,Th,Sa
	PRL	TW	.98	.69	.50	.50	Dly except T
	YIP	TW	.92	.79	.50	.50	Dly except T
	CHI	TW	.86	.73	.50	.50	Dly except T
	IDL	SR	.90	.67	.50	.50	Su,Th
	IDL	K	.91	.66	.50	.50	Su,Th
Singapore, Mal. St.	IDL	BO	2.26	1.77	.55	.55	Dly
	SFO	P	2.41	1.81	.55	.55	Sa
	LAX	P	2.41	1.81	.55	.55	Sa
	BOS	P	2.54	1.79	.55	.55	.....
	IDL	AF	2.26	1.77	.55	.55	.....
	BOS	AF	2.33	1.75	.55	.55	.....
	IDL	K	2.36	1.77	.55	.55	Su,W,F
	UL	K	2.54	1.91	.56	.56	Su,W
Sitka, Nicaragua	MSY	TA	.56	.42	...	...	M,W,F
	MEX	TA	.43	.33	...	...	T,Th,Sa
Sofia, Bulgaria	IDL	SS	1.48	1.12	.55	.55	Su,T,W,Th,Sa
	IDL	AF	1.52	1.15	...	...	.....
	BOS	AF	1.49	1.12	...	...	.....
Soerabaya, Java, N.E.I.	IDL	K	2.56	1.92	.55	.55	T,W,Th,F
Stanleyville, Bel. Congo	IDL	S	1.89	1.42	.55	.55	T,W,Th,Sa
Stavanger, Norway	IDL	SS	1.12	.55	.50	.50	Dly
Stockholm, Sweden	IDL	SS	1.15	.82	.50	.50	Dly
	IDL	BO	1.15	.83	.50	.50	Dly
	MIA	BO	1.20	.85	.50	.50	Dly
	IDL	AF	1.15	.86	.50	.50	.....
	BOS	AF	1.12	.84	.50	.50	.....
	IDL	K*	1.15	.86	.50	.50	Su,T,W,F,Sa
	UL	K	1.20	.90	.52	.52	Su,W
	IDL	S	1.16	.86	.50	.50	T,W,Th,Sa
	IDL	P	1.15	.86	.50	.50	.....
	BOS	P	1.19	.84	.50	.50	.....
Stuttgart, Germany	LGA	P	1.13	.85	.50	.50	Su,F
	BOS	P	1.19	.85	.50	.50	Su,F
	IDL	SS	1.13	.85	.50	.50	Dly
	IDL	S*	1.15	.87	...	...	T,Sa
	IDL	SR	1.13	.84	.50	.50	Su,Th
	IDL	AF	1.15	.85	.50	.50	.....
	BOS	AF	1.19	.90	.50	.50	.....
Sundsvall, Sweden	IDL	SS	1.20	.90	.50	.50	Dly

Destination	Airport and Airline	Rates (See Note)					Depart
		45 kg	100 kg	250 kg	500 kg	1000 kg	
Suva, Fiji Islands	LAX	P	1.80	1.80	.55	.55	M,Th
	SFO	P	1.80	1.80	.55	.55	M,Th
	SFO	BC	1.80	1.80	.55	.55	M,Th
	HNL	BC	1.80	.73	.55	.55	M,Th
	VR	BC	1.80	1.80	.55	.55	M,Th
Sydney, Australia	LAX	P	2.01	1.81	.55	.55	M,Th
	SFO	P	2.01	1.81	.55	.55	M,Th
	IDL	BO	2.01	2.26	.55	.55	Dly
	SFO	BC	2.01	1.81	.55	.55	M,Th,Sa,Th
	HNL	BC	1.42	1.06	.55	.55	M,Th
	VR	BC	2.01	1.81	.55	.55	M,Th
	IDL	AF	2.01	2.26	.55	.55	.....
	BOS	AF	2.05	2.24	.55	.55	.....
Sydney, N. S.	BOS	T*	1.00	.0005	...	...	Dly
Taipeh, Formosa	SFO	PH	2.26	1.77	.55	.55	W,Sa
	OAK	PH	2.26	1.77	.55	.55	W,Sa
	PDX	PH	2.26	1.77	.55	.55	T,F
	LAX	PH	2.26	1.77	.55	.55	T,F
	SEA	PH	2.26	1.77	.55	.55	T,F
	LGA	PH	2.26	1.77	.55	.55	T,F
	CHI	PH	2.26	1.77	.55	.55	T,F
	DCA	PH	2.26	1.77	.55	.55	T,F
	CLE	PH	2.26	1.77	.55	.55	T,F
	YIP	PH	2.26	1.77	.55	.55	T,F
	DEN	PH	2.26	1.77	.55	.55	T,F
	CHI	NW	2.26	1.77	.55	.55	.....
	CLE	NW	2.26	1.77	.55	.55	.....
	YIP	NW	2.26	1.77	.55	.55	.....
	MKE	NW	2.26	1.77	.55	.55	.....
	LAX	NW	2.26	1.77	.55	.55	.....
	MPS	NW	2.26	1.77	.55	.55	.....
	LGA	NW	2.26	1.77	.55	.55	.....
	PIT	NW	2.26	1.77	.55	.55	.....
	PDX	NW	2.26	1.77	.55	.55	.....
	DCA	NW	2.26	1.77	.55	.55	.....
	SFO	NW	2.26	1.77	.55	.55	.....
	OAK	NW	2.26	1.77	.55	.55	.....
Takoa, Peru	MIA	P*	.72	.53	.15	.15	Dly
	MSY	P*	.78	.45	.20	.20	Dly
	HOU	P*	.81	.48	.20	.20	Dly
	BRO	P*	.81	.48	.20	.20	Dly
	LAX	P*	.84	.62	.20	.20	Dly
Tamatave, Mad.	IDL	AF	2.75	2.67	.15	.15	Weekly
	BOS	AF	2.75	2.64	.15	.15	.....
Tampico, Mexico	HOU	P*	.18	.09	.15	.15	Dly
	BRO	P*	.10	.05	.15	.15	Dly
	LAX	P*	.35	.23	.15	.15	Dly
Tananarive, Madagascar	IDL	AF	2.30	1.73	.25	.25	Weekly
	BOS	AF	2.27	1.71	.25	.25	.....
Tangier, Morocco	IDL	AF	1.25	.94	.25	.25	.....
	BOS	AF	1.22	.92	.25	.25	.....
Tapachula, Mexico	MIA	P*	.42	.21	.15	.15	Dly
	MSY	P*	.39	.19	.15	.15	Dly
	HOU	P*	.39	.20	.15	.15	Dly
	BRO	P*	.37	.17	.15	.15	Dly
	LAX	P*	.43	.26	.15	.15	Dly
Tapajoz, Bra.	MIA	P*	.47	.23	.15	.15	Dly
	MSY	P*	.49	.23	.15	.15	Dly
	HOU	P*	.39	.26	.15	.15	Dly
	BRO	P*	.37	.23	.15	.15	Dly
	LAX	P*	.43	.26	.15	.15	Dly
	MSY	TA	.40	.25	...	...	Dly except Su
	MEX	TA	.26	.16	...	...	Dly except Su
Teheran, Iran	IDL	BO	1.81	1.36	.55	.55	Dly
	IDL	AF	1.81	1.36	.55	.55	Weekly
	BOS	AF	1.79	1.34	.55	.55	.....
	IDL	K	1.81	1.36	.55	.55	Su,Th
	UL	K	1.82	1.40	.59	.59	Su
	IDL	SS	1.81	1.36	.55	.55	Su,T,W,Th,Sa
Tela, Honduras	MSY	TA	.42	.25	...	...	M,W,F
	MEX	TA	.26	.19	...	...	T,Th,Sa
Tokyo, Japan	IDL	P	2.71	2.04	.55	.55	Su,F
	BOS	P	2.68	2.02	.55	.55	Su,F
	LAX	P	2.56	1.77	.55	.55	M,F
	SFO	P	2.56	1.77	.55	.55	M,F
	EDF	NW	2.26	1.77	.55	.55	Four Wkly
	CHI	NW	2.26	1.77	.55	.55	Four Wkly
	CLE	NW	2.26	1.77	.55	.55	Four Wkly
	YIP	NW	2.26	1.77	.55	.55	Four Wkly
	MKE	NW	2.26	1.77	.55	.55	Four Wkly
	MPS	NW	2.26	1.77	.55	.55	Four Wkly
	LGA	NW	2.26	1.77	.55	.55	Four Wkly
	PIT	NW	2.26	1.77	.55	.55	Four Wkly
	DCA	NW	2.26	1.77	.55	.55	Four Wkly
	IDL	BO	2.71	2.04	.55	.55	Dly
	IDL	AF	2.71	2.04	.55	.55	.....
	BOS	AF	2.68	2.02	.55	.55	.....
	SFO	PH	2.56	1.77	.55	.55	W,Sa

Destination	Airport and Airline	Rates (See Note)					Depart
		45 kg	100 kg	250 kg	500 kg	1000 kg	
Tampico, Ont., Can.	LGA	A	.12	.07	.04	.04	Dly
	LGA	T*	1.00	.0455	.10	.10	Dly
Tarcon, Cuah., Mex.	MEX	L	.60	.57	...	...	Dly
Trapani, Italy	IDL	LI	1.15	.92	.55	.55	F
Trinidad, Cuba	MIA	P*	.12	.09	.05	.05	Dly
	IDL	SO	.45	.30	.15	.15	.....
Tripoli, Libya	IDL	SC	4.04	1.21	.55	.55	Dly
Trujillo, Honduras	MSY	TA	.48	.27	...	...	M,W,F
	MEX	TA	.30	.22	...	...	T,Th,Sa
Tucuman, Argentina	MIA	P*	1.58	.71	.55	.55	F
	MSY	P*	1.58	.72	.55	.55	F
	HOU	P*	1.57	.81	.55	.55	F
	BRO	P*	1.57	.81	.55	.55	F
	LAX	P*	1.60	.90	.55	.55	F
Tumaco, Colombia	MIA	P*	.66	.53	.55	.55	Dly
	LGA	P*	.78	.61	.55	.55	Dly
	MSY	P*	.71	.53	.55	.55	Dly
	HOU	P*	.71	.53	.55	.55	Dly
	BRO	P*	.71	.53	.55	.55	Dly
	LAX	P*	.97	.55	.55	.55	Dly
Tunis, Tunisia	IDL	AF	1.57	.95	.55	.55	Four Wkly
	BOS	AF	1.57	.95	.55	.55	Four Wkly
	LGA	TW	1.57	.95	.55	.55	F
Turapan, Mexico	HOU	P*	.17	.12	.15	.15	Dly
	BRO	P*	.13	.06	.15	.15	Dly
	LAX	P*	.34	.27	.15	.15	Dly
Turrin, Gutierrez, Mexico	MIA	P*	.47	.26	.15	.15	Dly
	MSY	P*	.44	.22	.15	.15	Dly
	HOU	P*	.28	.16	.15	.15	Dly
	BRO	P*	.34	.21	.15	.15	Dly
	LAX	P*	.40	.31	.15	.15	Dly
Usumbura, Belgian Congo	IDL	S	1.89	1.42	.55	.55	T,W,Th,Sa
Uyuni, Bolivia	MIA	P*	1.19	.82	.15	.15	F
	MSY	P*	1.22	.82	.15	.15	F
	HOU	P*	1.26	.72	.15	.15	F
	BRO	P*	1.22	.72	.15	.15	F
	LAX	P*	1.26	.87	.15	.15	F
Vancouver, B. C., Canada	SEA	U	.01*	.005	.10	.10	Dly
	SFO	U	1.00	.004	.10	.10	Dly
	LGA	U	.004*	.001	.10	.10	Dly
	LGA	T*	10.13	.375	.10	.10	Dly
	SFO	BC	.11	.03	.03	.03	F & AR,W,D
	HNL	BC	.11	.03	.15	.15	S & AR, T,W
Varadero, Cuba	MIA	P*	.13	.09	.05	.05	Dly
Veracruz, Mexico	MIA	P*	.29	.15	.15	.15	Dly
	MSY	P*	.24	.15	.15	.15	Dly
	HOU	P*	.21	.14	.15	.15	Dly
	BRO	P*	.19	.13	.15	.15	Dly
	LAX	P*	.33	.26	.15	.15	Dly
	DAL	S	.42	.....	...	...	.....
	FTW	S	.42	.....	...	...	.....
	LRD	S	.38	.....	...	...	Dly
	SAT	S	.35	.....	...	...	Dly
Victoria, Brazil	LGA	P*	1.58	1.06	.55	.55	M,W,Sa
	MIA	P*	1.41	1.41	.55	.55	M,W,Sa
	MSY	P*	1.59	1.59	.55	.55	M,W,Sa
	HOU	P*	1.61	1.61	.55	.55	M,W,Sa
	BRO	P*	1.73	1.73	.55	.55	M,W,Sa
	LAX	P*	1.92	2.06	.55	.55	M,W,Sa
Victoria, B. C.	LGA	T*	10.13	.375	.10	.10	Dly
Victoria de las Tunas, Cuba	MIA	P*	.14	.09	.05	.05	Dly
Vienna, Austria	LGA	P	1.24	.93	.55	.55	Su,W,F
	BOS	P	1.21	.91	.50	.50	Su,W,F
	LGA	SI	1.24	.93	.55	.55	Frequently
	IDL	BO	1.24	.93	.55	.55	Dly
	MIA	BO	1.27	.96	...	...	Dly
	IDL	AF	1.24	.93	.55	.55	.....
	BOS	AF	1.21	.91	.55	.55	.....
	IDL	SS	1.24	.93	.55	.55	Su,T,Th,Sa
	IDL	K*	1.24	.93	.55	.55	T,W,F,Sa
	UL	K	1.30	.98	.52	.52	Su
	IDL	S	1.22	.93	.55	.55	T,W,Th,Sa
	IDL	SR	1.20	.90	.55	.55	Su,Th

Destination	Airport and Airline	RATES (See Note)				Depart
Whitehorse, Yuk.	MIA P*	.54	.17	.15		Dly
"	MIY P*	.59	.19	.15		Dly
"	BOC P*	.56	.19	.15		Dly
"	BSO P*	.54	.18	.15		Dly
"	LAX P*	.44	.36	.15		Dly
Visby, Sweden	IDL SS	1.10	.90	.30		Dly
Wall Walls, Aug. Eq. Swiss	IDL SO	1.60	1.30	.50		Dly
Wake Island	LAX P	1.55	1.15	.30		M,T,F,Sa
"	SFO P	1.55	1.15	.30		M,T,F,Sa
"	PDX P	1.55	1.16	.30		Sa
"	SEA P	1.55	1.16	.30		Sa

Destination	Airport and Airline	RATES (See Note)				Depart
Warsaw, Poland	IDL SS	1.20	.90	.30		Su,Th,Sa
"	IDL AF	1.35	.95	.35		.....
"	BOS AF	1.37	.95	.35		.....
"	IDL F*	1.50	1.00	.50		T,W,Th,Sa
"	IDL SR	1.20	1.00	.30		Su,Th
Whitehorse, Canada	SEA P	.35	.14	.10		T,Sa
Windsor, Ont., Can.	LGA A	.40	.35	...		Dly
"	CHI A	.30	.25	...		Dly
"	LGA T*	2.60	.6666	.10		Dly
Winnipeg, Man., Canada	LGA T*	2.75	.30	...		Dly
"	GFK W	.95	.....	...		Dly

Destination	Airport and Airline	RATES (See Note)				Depart
Zurich, Switzerland	IDL SR	1.10	.16	.20		Su,Th
"	IDL SS	1.12	.45	.30		Dly
"	IDL S	1.12	.84	.30		T,W,Th,Sa
"	IDL SW	.80	.31	.30		.....
"	IDL AF	1.12	.84	.30		Su Wkly
"	BOS AF	1.10	.83	.35		.....
"	IDL E*	1.12	.85	.35		T,W,F,Sa
"	IDL K	1.12	.80	.35		Su,W
"	IDL BO	1.12	.85	.30		Dly
"	MIA BO	1.12	.90	...		Dly
"	LGA TW	1.12	.85	.30		Dly except F
"	PHL TW	1.14	.86	.30		Dly except F
"	CHI TW	1.17	.89	.30		Dly except F
"	YIP TW	1.14	.86	.30		Dly except F
"	BOS TW	1.10	.84	.30		M

International Air Cargo Rates are a standard feature in AIR TRANSPORTATION. This is another typical service for air shippers who require up-to-the-minute data. The rates appearing in this issue were current at presstime.

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GUEST EDITORIAL

(Continued from Page 6)

sobering words *"Remains of John Doe in Compartment E, notify —— Funeral Home so can meet at planeside."* Speed in delivering merchandise has had a great deal to do with the growth of air freight, but speed in delivering information has also played a vital part. Traffic managers have told us that they often spend 50% of their time tracing shipments. The advance manifest allows us to trace a shipment in a matter of minutes.

Another service rendered by the air freight carriers has to do with the directional commodity rates granted by the Civil Aeronautics Board to help us whip the backhaul problem. Our sales force has spent a great deal of time developing new markets and outlets for producers in the West and Southwest. Farmers are now getting better prices by being able to put fresh vegetables in northern and eastern markets at the right time. Through our teletype system we can give them the latest market quotation on any commodity so that they can direct their shipment to the best advantage. Those who formerly planted for only local consumption have been able to increase their production. The same holds true for small manufacturers that never dreamed of selling outside of their own area. What other form of transportation offers a nationwide sales force to its shippers?

All of these services originated in the developmental stages of air freight when business was difficult to obtain, but they are now so well identified with the business that they are here to stay—and I believe that all concerned will benefit thereby.

AIRBORNE CONTAINER

(Continued from Page 7)

we thought five years ago and what we think now. How much we were right as judged by what has happened since then, and how often we were wrong.

In December, 1944, the Society of Automotive Engineers held an air cargo meeting. The predictions made at that time have turned out to be rather accurate, both as to items that would be shipped and as to the increase in volume that would take place. Flowers and seafoods were mentioned as probable volume items. Flowers, at least, have more than made good on this prediction and seafoods have been shipped in some volume. Fruits and vegetables, on the other hand, which were also mentioned as future volume items, have not yet come up to expectations. However, we believe the shipment of certain fruits and vegetables by air will ultimately prove to be a desirable means of transporting these products from the field to the consumer.

At that time we were looking for what I call "jackpot" items; that is, items which promised to be especially adapted to air shipment and therefore would be shipped in large quantities. We felt that such "jackpot" items would come up from time to time and be so obvious that we would wonder why we had not thought of them before. Some progress has been made in the development of "jackpot" items, but frankly we in the container industry are still on the hunt for these items.

It was approximately 1944 when J. D. Malcomson, of the Robert Gair Company, discussed air packaging in a talk which was widely reprinted in trade magazines. (See July, 1944, AT.) He laid down the requirements of the ideal container for air shipments. These were strength, light weight, low cost, ease of handling, small storage space when empty, and small extra space when filled over the product being shipped, adaptability to many commodities, and availability. Mr. Malcomson concluded that the modern corrugated case was the answer. Time has proven this answer to be correct.

One of the outstanding facts, as I see the picture, is that air shipment has not produced a large variety of new packages for its specific use. That may be our fault, in the container industry, or it may be those in the air transportation industry. With few exceptions, the air carriers can haul al-

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most anything anyone can haul, and they can haul it in the same forms that have been found suitable for other means of transportation. However, a survey of the air cargo operations on the Pacific Coast, which I have just completed, indicates that the non-existence of any specific packaging code, similar to the Consolidated Freight Classification used by the railroads, is hindering the progress of this mode of freight movement.

I noted a flagrant use of improper packaging which would not have been permitted in the shipment of similar items by rail. It appears in many cases that no thought whatsoever has been given to the choice of a package which would carry the product safely to its destination. I feel that the progress of the air cargo industry is dependent upon standardization of packages through the formulation of standard and adequate packaging specifications which would be adhered to by the entire industry. Steps should be taken immediately in the development of these standard specifications for each commodity. We in the container industry are prepared to assist in this project.

Generally speaking, the packaging requirements for air shipments are not as different from those for surface shipment as might be expected. Surely the penalty for excess weight is greater, but usually if the package is correctly designed, it is right for both surface and air shipment. For example, take cut flowers, which is the largest volume perishable item being shipped East by air. For either rail or air shipment they are generally packed in a corrugated case of a two-piece telescope design. When shipping by rail, ice is included in the box to keep the flowers cool and moist for the two to four days required for arrival at destination. For air shipment, this ice is not used as the flowers are usually for sale in the Midwestern or Eastern shops by the following day. A survey of the wholesale florists in California indicates that as much as 60 to 80 per cent of their total production is shipped by air.

Large quantities of baby chicks are presently being shipped by air. Specially die-cut, compartmented, ventilated corrugated boxes of various patented designs are presently being used. The same box is used whether the shipment is by rail or by air. Fireboard Products, Inc., is licensed to manufacture the "Luxury Liner" chick box, which is a tapered corrugated container, suitable for holding either 50 or 100 baby chicks. The tapered feature insures that the chicks receive an adequate amount of air even when stacked in close tiers. United Air Lines report that they handle over 6,000 chicks a day during the season in this type of package and are forced to turn down twice that number because of lack of space.

Of course, almost everything that is shipped is sometimes shipped by air. It is my understanding that the total of the smaller items and emergency shipments, each of which would be just a drop in the bucket, do add up to a substantial portion of the total volume by air. What we primarily are interested in, however, are those items which would be shipped consistently in fair or large volumes, or as referred to earlier as "jackpot" items.

Most Important

In addition to those items, the following are some of the more important Eastbound shipments:

- Aircraft parts.
- Style goods, that is products of the garment industry, particularly sportswear, such as dresses, blouses, suits, sport shirts, swimming suits.
- Machinery.
- Some seafoods (and I still think that seafood is a potential volume item). At the present time, heavier seafood shipments are made to the Midwest from the Atlantic Coast than from the Pacific.
- Turkey hatching eggs.

Westbound, we have some of the same items and some different. Style goods, merchandise of the garment industry, mostly other than sport clothes. Machinery moves both East and West. IBM, whose equipment is leased, ships by air. This starts the lease period on its equipment just that much earlier. Automobile parts are often shipped by air. Aircraft parts and materials move both ways. Critical television and other electronic parts move mostly West.

Getting back to "jackpot" items, from time to time sizable operations in the shipment of fresh fruits and vegetables have been proposed or undertaken. We designed and manufactured cases for a Mexican tomato deal in which the tomatoes were shipped by air from the lower tip of Lower California in Mexico to Nogales, Arizona. This operation is not active at the present time. Some years ago an extensive study was made which indicated that lettuce could be profitably shipped by air in substantial volume from Salinas, to Detroit. This study seemed to be a careful and comprehensive one, but the shipment of lettuce by air has not been put into commercial use. Before his untimely death, Ralph E. Myers carried on a very admirable experiment or series of experiments in air shipping and in the marketing of fruits and vegetables so shipped. These things may have a future. I am inclined to think they have, but we are not aware of any sizable operations of this kind under way at the present time.

I wish to emphasize here the fact that five or six years ago we thought perishables such as fruits, vegetables, seafoods and flowers appeared to be naturals for air shipment. Our prediction was correct as far as flowers and seafoods are concerned. However, as mentioned above, the shipment of fresh fruit and vegetables by air has not as yet been used on a continuous and steady commercial basis. It is possible that the use of the proper package for these items would encourage their shipment by air. Thinking along these lines the unit or consumer package immediately comes to mind and seems to fit ideally into this picture of air shipment of fresh fruits and vegetables for the following reasons:

In the shipment of fresh produce by air, it would seem logical that due to the premium placed on shipping space bulk shipments be ruled out, for a certain percentage of any bulk shipment cannot be sold due to spoilage. In a prepackaged, or consumer unit pack, the product is graded and selected at the point of origin with the result that freight is paid only on salable merchandise. This goes hand in hand with the fact that prepackaged products can be sold on the basis of quality and "vine-ripeness" vs "mature-green" or "repacked" bulk fruit. Actually a full week or more can be saved from the time of harvest by the prepackage-air-transport combination. This assures the retailer of a longer shelf-life and the consumer of fresher, more nutritious fruits and vegetables.

Substantiating the use of consumer unit packages, I quote from a report made by Mr. Ralph Myers on an extensive test shipment of fresh fruits and vegetables in 1945:

"These experimental shipments were undertaken on the premise that prepackaging or consumer packaging was both feasible and necessary for air freight shipments. Our findings confirm that premise."

The following requirements should be kept in mind relative to the use of a consumer package for air shipment:

1 The consumer package must be designed and constructed to allow for compact packing, despite varied sizes of the items, so that movement within the individual package is eliminated.

2 It must have extended edges or some similar feature to permit distribution of weight and so give needed protection to bottom of packages.

3 The small package must be protected from being crushed by other

cargo by being packed in strong master containers.

4 Identification, provided by means of a brand or trademark, is an important basis for effective advertising and sales promotion; for perishables, dating the package could emphasize the element of freshness.

5 The package should allow for convenient inspection of the product by consumers, with a minimum of handling, as through a transparent window.

6 The package should contain the quantity of produce commonly purchased by consumers.

Another factor that can be considered is that of the effect of changes in atmospheric pressures, which are in turn due to changes in altitude. Obviously many things would show no effect, such as hardware items and clothing. The effect on flowers, fruits and vegetables could not be predicted with any certainty and the exact answers had to be obtained from Research Laboratories and tests. Some are familiar with United States Department of Agriculture report No. 197 by Barger and Pentzer, which went into this question and came up with answers. The actual observations were conducted in the Lockheed altitude chamber—that is a depressurizing chamber, and were translated into altitudes to which the pressures would apply. (See January, 1949, AT.)

Thirty-four fruits and vegetables were studied and it was found that for altitudes up to 30,000 feet and rates of climbor descent up to 3,000 feet per minute, there was no damage. I think the reader will agree that both the 30,000 and the 3,000 are rather high figures compared to what are usually encountered in air freight shipments. Only at such extereme altitudes as 50,000 feet and such an extreme rate of climb as 5,000 feet per minute was any damage noted. Even that was by no means 100 per cent, but was closer to 8 per cent of the quantities tested. The results of this research project indicate the effects of altitude on perishables are nil.

Just a few relatively unimportant items do show any effect. Some ballpoint pens have bubbled over, I am told. It was feared that some television tubes or materials would give trouble, but it was found that they did not. So far as I have been able to find, altitude is not a real problem in air freight.

I am going to pass over the question of temperature rather lightly on the basis that the need for refrigeration and the need for protection from freezing are not very different in air shipment from what we have in surface shipment. The differences, on the average, probably favor air shipment; that is, make temperature less of a problem in the air than on the ground for two principal reasons: first, because the air temperatures average lower than the surface temperatures; and second (and this is very important) the period of time that has to be considered is shorter.

I might mention one of our products in this connection. Paperboard in general, and corrugated cases in particular, without any special treatment or provision, are very good temperature insulators and offer considerable protection to the item packed against rapid changes in temperature.

Developments

What developments of the paperboard industry have had a favorable effect on the packages used in air cargo shipments? It will interest the reader to learn that during the past few years improvements have been made in the corrugated medium and the liners of corrugated boxes toward lightening and strengthening the resulting product. We are now producing a .009 corrugated medium of comparable or greater strength than that we formerly produced, the weight of which is 27 pounds per thousand square feet compared with 38 pounds per thousand square feet. In other words, we have reduced the weight of the corrugated medium by approximately 30 per cent, and have maintained equal or greater strength. Jute liners have been reduced in weight by approximately 20 per cent, still maintaining the former strength, while the weight of kraft liners has been reduced 10 per cent. The use of kraft liners for corrugated containers used in air shipments is desirable because they are the lightest material for any specified strength.

I would like to go back to the initial question, and briefly summarize the points discussed.

What has been done and what is left to be done by the packaging industry to aid in the maximum development of the air cargo industry?

We have found that predictions made five or six years ago as to what products would be most adaptable to air transport were partially correct. Today's tonnage statistics show that flowers have more than fulfilled all predictions and fresh fruits and vegetables have not been shipped to the extent anticipated. Tests have indicated, however, that through the use of prepackaged consumer packs it is possible that the air shipment of fresh fruits and vegetables may become economically feasible. Research laboratory tests which have been made in the last few years indicate that the effect of altitude on fresh fruits and vegetables is negligible. The paper container industry is now producing lighter, stronger cartons, which are ideally suited for packaging products being shipped by air.

What can be done by the paper industry?

Current surveys indicate the need for a standard packaging code, similar to the Consolidated Freight Classification used by the railroad industry. I believe that the container industry can and will work with the aircraft industry in the development of such a code, as well as the design of proper containers for specific items to be shipped by air. If the air freight industry continues as it has been doing to provide improved service on more and more commodities to more and more places at rates which are right, its future is not only secure but I think bright.

BOOM IN BLOOMS

(Continued from Page 8)

borne to Eastern and Southeastern markets via regular scheduled cargo-planes, operated by both the passenger airlines and all-cargo lines.

The first record of an aircraft used for the transportation of a full planeload of flowers occurred in 1931 when a Lockheed airplane was chartered to fly camellias and gardenias to the Chicago and New York markets. The use of air transportation for complete planeloads of flowers on an experimental basis continued through the years preceding establishment of air cargo service. Chartered planes were used again when the airlines were called upon to move Decoration Day flowers during an emergency caused by the suspension of express service. This would indicate that the occasional utilization of air transportation for shipping planeloads of flowers occurred only during emergencies or when holidays brought sufficient value for cut flowers to justify the higher shipping cost. It was not until the Easter season of 1946 that the floral industry was able to make full use of air transportation for shipping. By then the airlines were equipped to handle a steady flow of traffic.

Statistics show that the amount of air freight handled through the San Francisco Airport in 1949 reached the astonishing total of 14,013,204 pounds. It is estimated that flowers accounted for 7,200,000 pounds, or in excess of 50% of the total air freight from this airport. The unprecedented use of air freight by the flower industry is remarkable inasmuch as floral products were shipped almost exclusively by rail express in previous years. It repre-

FLIES FOR FIRST TIME

Flown for the first time last October, the Martin 4-0-4 has been purchased by two airlines —TWA, which has ordered 40; and Eastern, which has 35 on order. Top speed of the twin-engine transport will be 312 miles per hour. Payload of plane is 10,205 pounds.

cents a substantial volume of traffic for the airlines.

The development of air cargo service plays an important part in the opening of new markets for the more perishable items such as, roses, carnations and other flowers of a delicate nature which could not be shipped to any great distance by slower transportation methods. The speed of air not only offers larger and more diversified markets, but adds greatly to the marketable life of flowers. Overnight deliveries give flower shippers in California the advantage of two to three extra days of sales that are lost in slower movement by rail. This is especially true when sudden adverse weather conditions deplete markets in other parts of the country.

In the early stages of air freight transportation, many problems and difficulties were encountered because of the inexperience of cargo personnel and the lack of knowledge in the handling and expediting of flower shipments. Competitive airlines bidding for freight from the floral industry offered airborne rates as cheap as rail rates. With this inducement airborne flower shipments suddenly became a tremendous traffic. However, the low rates eventually proved to be an uneconomical operation for the newly formed air cargo lines. Necessarily, tariffs were revised, weights were calculated on a cubic dimensional basis, and charges were made in accordance with the greater weight, whether actual or dimensional.

Because the romance and glory of flying had been so widely publicized during the war, many expected miracles from this new form of transportation. The absence of experienced men with the know-how of handling flowers, and occasional improper loading of planes during the infancy of air cargo operations led to many sleepless nights and headaches for florists throughout the nation. It was not unusual for a frantic florist in Chicago to phone his shipper inquiring about his flowers, ordered only a few hours before, only to find that careless loading had caused his shipment to land in New York. These little incidents served to sober the enthusiasm of those who expected too much from the newly organized air freight operations.

As the volume of flower traffic grew steadily from year to year, it became necessary to have a coordinator handle the reservation of space, assemble and route shipments and perform other duties essential to the maintenance of a steady and efficient movement of airborne flowers. Airborne Flower and Freight Traffic, Inc, came into existence to meet this necessity. This organization was established to provide the flower shippers in the Bay Area with the vitally needed expediting of shipments which were bottle-necked at the airports because of insufficient or improper allocation of space to accommodate the tremendous tonnage of flowers now shipped by air. Barring unforeseen mechanical troubles and unfavorable flying weather, shipping flowers by air became a regular routine. Progressing with this modern means of flying flowers, new techniques in packaging were utilized to minimize the higher cost of air freight rates and intensive research was made by the airlines to determine the effects of high altitude in flowers.

Among the greatest difficulties that developed with the growing pains of air shipping was ground handling at airports, especially the handling of transfers from plane to rail and connecting airlines. The terrific extremes in temperatures in the eastern part of the country, coupled with delays, caused irreparable damage and losses to shippers of this perishable commodity. In this connection, it should be pointed out, that the airlines are doing their very best in cooperation with the florist to solve these problems, and are making considerable progress. Despite these many problems, air freight is here to stay, for never before had the superiority of California flowers been so definitely established as the day airborne shipments were delivered into the Eastern cities in all their dewy freshness.

Through associations, such as, Northern California Flower Shippers and Southern California Floral Association, constant study is being made in an effort to seek improvements in air cargo service and reductions in air rates. The industry recognizes that even though we have many natural advantages in our favor, other competitive growing areas closer to the newly developed markets, will capitalize on the disadvantages of the higher shipping cost of our products. The three most important factors governing flower shipping are: speed, dependability, and cost. With this in mind, Northern California Flower Consolidators, composed of a large group of shippers, was recently organized. The purpose of this organization is to seek means to reduce the cost of air transportation by consolidating and distributing the combined shipments of its members. This provides the airlines with large consolidated shipments, under one master airbill, thus reducing cost of handling to the carriers. If shipping cost can be reduced through this organization, it will result in vast savings to consignees throughout the country.

Suggestions

The shippers of floral products are of the opinion that adoption of the following suggestions will lead to the encouragement of a greater use of air freight by the floral trade. They believe:

- That sufficient air cargo space to accommodate heavy loads during holidays and peak production periods will increase the use of air.
- That additional service into markets of the Southeast and Southwest should be added.
- That proper protection and careful handling at transfer points is most important, and that provisions should be made for refrigeration and storage of flower shipments when long delays occur.
- That uniform excess value charges on all airlines should be worked out.
- That there should be special com-

modity rates for low value flowers and products, such as calla lilies, gladioli, iris, and other products of high-density weight.

- That airlines should establish uniform cubic dimensional weight charges for all carriers. (Otherwise there is confusion in computing shipping costs.)
- That industry-wide training and indoctrination be given to all personnel handling floral products to eliminate damage from rough treatment of merchandise enroute.
- That the importance of on schedule departures cannot be minimized and should be strictly adhered to. (This will insure arrival in time for the Eastern market hours and also allow sufficient time for transfers to connecting carriers.)

We are cognizant of the fact air cargo is a comparatively new phase of the air industry. Many new advancements in the field of aviation, such as modern cargoplanes with increased capacity, will undoubtedly be made in the future, thereby enabling the airlines to operate at a lower ton-mile cost. The resulting savings passed on in the form of lower rates would almost automatically increase the volume of airborne flowers.

The splendid spirit of cooperation existing between the airlines and the flower shippers will, we are sure, lead to an early solution to the problems confronting us, and to the mutual benefit of both industries.

GROUND TRANSPORTATION

(Continued from Page 9)

In ground transportation the hours of use must be taken into consideration to determine the operating cost. Airlines customarily dispatch their cargoliners in the evening, and destination is reached the same evening or early next morning. Air freight, in most instances, originates and is delivered in areas comprising many square miles. But there is a short-period requirement where a large number of motor trucks must pick up and deliver. I say "short period" because the labor contract calls for a working day of eight hours in today's market, and in most cases from 8:00 a.m. to 5:00 p.m. This naturally results in a heavy work load in a limited space of time for the ground agent.

The airlines, in their endeavor to set lower rates and move an increasing volume, must and did take into consideration pick-up and delivery costs. They compared the cost of their own private fleet of pick-up and delivery equipment (which would have an operating factor around 12½% and possibly 50% during an eight-hour day not including Saturdays, Sundays, and holidays when most commercial users of air freight do not open their doors), with the cost obtained by hiring public motor carriers to render the same service, and found that the public carrier was experienced and a specialist, and would be able to employ his many vehicles in handling other traffic when not delivering air freight. As the public carrier, of necessity, has to employ his equipment with a higher-use factor than the 12½% minimum and 50% maximum of the privately owned fleet, he has been able to quote charges less than those the airlines must charge when rendering the service with their own equipment. This saving has been passed along to the shippers and is a major contributing factor in reduction of cost and thus bringing about the volume and permitting service to be improved while rates decline.

Although the ground agent can be compared with the other forms of transportation, such as rail, water, and highway truck transport, in the servicing of their accounts, the ties between the airline and the ground agent are stronger due to the fact that motor transportation is the only conveyance between the twin requirements of cost and service rendered by the airlines.

Accessibility

Many concerns using water transportation are located near the water and are accessible by direct dockage or by barge. The highway trucker can spot his van at the shipper's or receiver's door; the rail line can spot the car at the industry's door or designated team track; but the airline must arrange to move air freight from and to one central airport located miles from the business and industrial section which generally is at or near rail, highway and water facilities.

Those trucking concerns who joined the airlines in pioneering air freight and are today serving this industry and its industrial needs have found that air freight shipments differ from other types of freight in type, volume, and requirement. Some of the factors constituting this dissimilarity are:

- Air freight cannot be held in terminals after pick-up nor before delivery, due to its urgency.
- This type of freight requires more care in handling due to fragility or higher dollar value.
- Schedules must be made and strictly observed in every possible instance.
- Schedules must be changed on short notice to meet weather or traffic conditions.
- Constant instruction and supervision of personnel, instilling in them the importance of their fulfilling the air freight commitment—safety, speed, and dependability at reasonable cost.

In ground transportation of air freight you find the *specialized carrier*, the *private carrier*, and the *general freight or common carrier*.

1 The *specialized carrier* is engaged in the pick-up and delivery of a special commodity. For example cut flowers are cut, sorted, packaged, and delivered direct to the airport in a short space of time by a flower grower cooperative in its own special equipment. These shippers are making trips to the airport at various times during the day, as a good part of that freight is shipped on scheduled passenger planes and not necessarily all-cargo flights. The grower thus saves the distant florist the necessity of having to maintain heavy stocks of a perishable commodity. There also is the carrier who picks up and delivers garments on hangers. This carrier picks up a wedding dress, suit, sport coat, or fur coat, on hangers enclosed in a cloth or paper bag, with the truck fitted to accommodate garments on hangers, and delivers them to the airport for transport on specially equipped planes. The articles are pressed before shipment and generally delivered to retail stores, jobbers, and branch offices of the manufacturer, in the same condition as shipped, with the savings in handling, inventory, packaging and pressing costs.

2 The *private carrier*. As an example, the auto industry has its own equipment to pick up regular and special shipments of parts, stocks, etc. This type of carrier generally operates on a 24-hour schedule, meeting the planes on arrival. Any premium for his own ground transportation is made up by maintaining constant production or because of his heavy volume and a regular (sometimes a twenty-four hour) use factor for his equipment. The farmer also would fall under this category, as he uses his own equipment to transport fresh fruits and vegetables to the airport for shipment to distant markets.

3 The last and most important distributor of air freight is the *general freight common carrier* handling the vast bulk of ground transportation. This carrier is obliged to accept instructions from the individual air carriers for the pick-up of freight. He will accept freight from the consignors and transport it to the air freight terminal of the airline concerned. He will issue the airbill of the appropriate air carrier at the time of accepting shipment, and prepare the airbill completely by inserting complete names and addresses

of consignor and consignee, shipper's declared valuation, date and time of receipt, and complete description and weight of the article receipted. He will determine whether the shipment is to go out on a COD basis and whether it is a prepaid or collect shipment. He will furnish a copy of the airbill to the consignor and the remaining copies to the interested airline. He should prepare a separate manifest for each airline showing consignor, consignee, number of pieces and weight, and have the respective line sign the manifest as his receipt. He must have a city terminal where he can accept and deliver air freight shipments and where he can assemble and distribute lot shipments at the request of the air carrier concerned. He has to set up a regular schedule from Monday through Friday for pick-up and delivery of air freight to and from the air terminal. He must have equipment and manpower available for any special service needed by the airline during "off" hours and on Saturdays, Sundays, and holidays.

Like any good merchant or manufacturer, the ground carrier is constantly alert to opportunities to reduce his tangible costs. If he can buy better goods for less, he does so.

His intangible costs are those over which he cannot exercise direct control. However, they are of a consequence worth mentioning. He finds that his costs are increased—and consequently air freight costs are increased—by a number of avoidable factors under control of shippers, receivers, airlines and airline terminals. For example, some shippers request pick-up to be made many hours before the air freight is available, and this results in excess waiting time or in a second pick-up. When the order for pick-up is given to the airline for transmittal to the ground agent the time should be stated as to when the freight will be available so that the ground agent will be better able to set up his work schedule. Receivers are also prone to telling everyone but the receiving clerk that they are expecting an air freight shipment, that they need it for a specific purpose, and that it should be given priority for receiving.

But usually these two factors of intangible expense are not borne when experienced shippers and receivers are involved, but a continued education of shippers and receivers is a constant necessity as increasing numbers of businessmen become aware of the advantages and decide to forward goods or requirements via the airlines.

Other instances of intangible cost are incurred at times at the airline terminal where station attendants will be busy with other duties when the ground agent's truck is at hand for pickup or delivery. They should be just as anxious to see that he gets his freight and papers on or off the truck with the least possible delay as your air freight movement is not completed until it arrives at the consignee's door and any delay along the way is a direct reflection on the air freight industry as a whole.

Another factor that would expedite delivery of air freight and lower the cost of its handling is proper loading and unloading facilities at the air terminals. At most air terminals there has been no provision made for picking up and delivering any volume of freight. A loading platform, truck level, is a must. At the present time most of this freight is picked up from floor level, loaded onto the tail gate of the truck, and moved from the tail gate to the head of the truck, which is a very costly operation. A loading platform would also relieve much of the congestion now found at the air terminals by providing working space for all trucks serving the airport.

Outside Area

The area outside the general pick-up and delivery zone has been—and still is—a source of concern to both the airline and the ground agent. Thought has been given to this problem, but no suitable solution has been found. Attempts have been made to make arrangements with other truck lines serving the outlying area, but arranging favorable pick-up and delivery schedules to coincide with those of the airline has been the big trouble. In most cases, freight destined to outlying cities is loaded the night before and leaves the freight terminal first thing in the morning or during the night. The freight arriving by plane during the evening and early morning hours cannot possibly make connections with those trucks. The same thing applies to merchandise being shipped from the outlying areas. This arrives at air port cities too late to make connections with the outgoing flights.

There is some possibility that in the not-too-distant future, with the movement of industry into small communities, the volume of freight will increase to a point where it would be profitable to set up a daily pick-up and delivery service for those towns, just as it is for the larger cities. Those concerned with the air freight picture will continue to work on this phase as they realize that without adequate service for smaller communities the ultimate goal of air freight progress has not been reached.

The ground agent is exercising every means at his disposal to improve his method of handling air freight. With experience such as that gained during World War II and the Berlin Airlift, and with the current Korean situation placing a greater share of the responsibility on air transportation of freight, the reduction in the present cost with improvement in service will require the ground agent to be ready to institute many more complemental services to handle the increasing volume of air freight.

However, as mentioned earlier, ground transportation of air freight started with a bicycle—and now tractors and trailers are being used. So, apparently the ground agent is keeping up with the flying freight carrier to meet their mutual and related problems.

U. S. OVERSEAS AIR CARGO

(Continued from Page 10)

riers shown approximately tripled during the first three postwar years, rising from a total of 15.1 million revenue ton-miles in 1946 to 45.3 million in 1948. The table does not show the ton-mileage of property service in nonscheduled operations, which, on the basis of incomplete data, aggregated 2.7 million in 1948. Thus the total scheduled and nonscheduled cargo ton-mileage of the carriers in table 27 was approximately 48.1 million during 1948. Pan American Airways, whose traffic constituted from 70 to 75 per cent of the total scheduled ton-miles for all carriers during the period under review, showed its greatest increase in the Pacific-Alaska Division, particularly in Alaska operations. The rise in its Atlantic Division was also relatively pronounced, but operations in its Latin American Division increased only two-fold. The latter increase, however, was particularly significant since it was measured from a much larger base in 1946, and represented growth beyond a relatively high level previously established.

Table 27 also discloses that the total volume of traffic increased during the three-year period from quarter to quarter, with two exceptions—the third quarter of 1947 and the first quarter of 1948. The data in the table are not sufficiently detailed to permit conclusions with respect to seasonal variation in overseas air cargo traffic, particularly since they pertain to a new industry following a rapid growth trend. They would seem to suggest, however, that the first and fourth quarters are, respectively, the periods of lightest and heaviest cargo movement for United States certificated overseas air cargo services as a whole.

The preceding discussion of traffic volume has been in terms of ton-miles.

TABLE 28.—*Distribution of Traffic of Carriers Engaged in U. S. Overseas Air Cargo Services, and Aircraft Utilized, Third Quarter, 1948*[1]

Service and carrier	Aircraft in service[2]				Revenue tons of cargo carried[3]	Revenue ton-miles of cargo carried[3]	Revenue sales items
	No.	Type	No.	Type			
Trans-Atlantic service							
U. S. certificated carriers							
American Overseas Airlines	10	DC-4	7	L-49			
	1	DC-3			[4] 2,700	1,600,000	3,500,000
	1	DC-4			24	16,000	170,000
Colonial Airlines	1	DC-3					
Pan American Airways, Atlantic Division	3	Constellation	2	DC-4	705	1,705,212	3,561,914
Trans World Airline	11	L-749	15	DC-4			
	0	C-69	0	DC-6	330	1,580,975	3,991,627
Total 6 carriers					3,059	5,012,187	10,273,586
U. S. uncertificated irregular air carriers							
Slick Airways							
Seaboard & Western Airlines	3	DC-4			1,400	1,320,000	300,000
Transocean Air Lines	1	DC-4			[4] 600	(5)	(5)
Trans Caribbean Air Cargo Lines		(5)			55	94,200	11,000
Total, 3 carriers					2,055		
Foreign scheduled carriers							
Air France	7	Constellation			69	(5)	(5)
British Overseas Airways Corp.					(5)	(5)	(5)
Trans-Pacific service							
B.O.A.C. Royal Dutch Airlines	6	Constellation	2	DC-6	300	300,000	675,000
SABENA Belgian Airlines					(5)	(5)	(5)
Scandinavian Airlines System	5	DC-6			65	100,000	225,000
Swiss Air Lines					(5)	(5)	(5)
Total, 3 carriers					334		
Total, Trans-Atl. Serv. (10 Carriers)					3,114		
Trans-Pacific service							
U. S. certificated carriers							
Northwest Airlines	3	DC-4			[4] 65	(5)	(5)
	10	DC-4			[4] 200	1,000,237	2,171,102
Pan American Airways—Pacific—Alaska Division, Pacific operations							
United Air Lines	3	DC-6			75	80,000	141,729
Total, 3 carriers					340		
U. S. uncertificated irregular air carrier Transocean Air Lines	(5)	DC-4			[4] 11	(5)	(5)
Pacific scheduled carriers							
B.O.A.C. Commonwealth Pacific Airlines					1	51,211	(5)
China National Aviation Corp.					(5)	(5)	(5)
Philippine Air Lines					78	(5)	(5)
Total, 3 carriers					80		
Total, Trans-Pac. Serv. (6 Carriers)					475		
Alaska service							
U. S. certificated carriers							
Northwest Airlines	(5)				[4] 84	(5)	(5)
Pan American Airways—Pacific—Alaska Division, Alaska operations	1	DC-4			[4] 738	1,000,000	600,000
Total, 2 carriers					822		
U. S. uncertificated irregular air carriers							
Air Transport Associates	2	C-46			82	120,000	30,000
Arnold Air Service					29	12,000	60,000
General Air Cargo					19	20,000	(5)
Golden North Airways					18	(5)	(5)
Mount McKinley Airways	2	(5)			32	32,000	150,000
Pacific Alaska Air Express	1	DC-3			19	23,000	57,000
Pennsylvania Air Transport	1	DC-3			21	30,000	75,000
Standard Air Corp.	1	DC-3			21	27,000	67,500
Tatonduk Air Service	0	DC-3	2	(5)	10	14,000	35,000
Total, 9 carriers					268		
Alaska air carrier Alaska Airlines	5	DC-4	6	C-46	661	(5)	(5)
Total, Alaska Service (12 Carriers)					1,751		
Latin-American service							
U. S. certificated carriers							
American Airlines	5	DC-4	1	DC-4			
	1	DC-3			515	307,000	614,110
Braniff Airways	1	DC-4	1	DC-3			
	1	DC-3			5	15,000	200,107
Chicago & Southern Air Lines	1	DC-3			31	34,144	232,616
Eastern Air Lines					15	101,427	101,236
National Airlines	1	DC-4			133	85,713	112,909
Pan American Airways	32	DC-4	20	DC-3			
Latin American Division	7	C-240	1	DC-4	2,513	1,000,304	2,313,121
Pan American-Grace Airways	11	DC-3	9	DC-4			
	6	DC-4			323	455,919	1,151,453
Urabá, Medellín & Central Airways					23	8,473	53,864
Total, 8 carriers					3,679	2,171,581	10,215,926
U. S. uncertificated irregular air carriers							
Aerovias Sud Americanas	1	C-46			691	561,850	17,000
Aviation Services Corp.	0	DC-3			69	55,077	68,000
Caribbean-American Lines	1	C-46			98	60,970	8,100
Slick Airline	1	DC-3	1	C-46	180	100,104	955,773
Skyways Airways	1	DC-4			237	180,533	93,232
Skyways International	1	C-46	1	(5)	87	107,711	89,761
Southern Air Express					215	99,787	35,640
Trans Caribbean Air Cargo Lines		(5)			79	126,575	138,000
Total, 9 carriers					1,654	1,334,610	671,000

Service and carrier	Aircraft in service[2]				Revenue tons of cargo carried[3]	Revenue ton-miles of cargo carried	Revenue sales items
	No.	Type	No.	Type			
Foreign scheduled carriers:[6]							
B.O.A.C. Royal Dutch Airlines					[4] 300	(5)	(5)
CSNA (C.S. Mission on Aviation, U.S.)					48		
Total, 2 carriers					348		
Foreign uncertificated carriers:[6]							
American Cruisers					20		
Aerovias Q. S.A.					[4] 25	(5)	(5)
Cia. Dominicana de Aviacion, S.A.					154		
Empresa Aerea Interamericana, S.A.					36	(5)	(5)
Servicio Aereo Nacional de Honduras					21		
Servicio Aereo Nacional Centroamericano, Honduras					66	(5)	(5)
Transportes Aereos Transandinos, C.A.					150	(5)	(5)
Transportes Aereos Nacionales, S.A.					19	(5)	(5)
Total, 6 carriers					1,151		
U.S. uncertificated cargo carrier Alaska Aviation Co.					185	(5)	(5)
Total, Latin-American Service (27 carriers)					1,942		
Grand total, 33 carriers, all services					11,310		

[1] In general, the traffic data pertain only to cargo movements between continental United States and other areas, although in a few cases, a small amount of other traffic is included. For example, the total traffic for Pan American's Latin American Division includes whatever cargo is carried locally within a foreign country or between two foreign countries by Pan American Airways, Inc. Also, see footnote [4] below.

[2] For United States certificated carriers, the number of planes in the cargo service operated during the quarter is revenue service. Where the number was reported fractionally, it was rounded to the nearest whole number, and single aircraft reported as less than 0.5 were omitted. For United States uncertificated irregular air carriers, the data refer to airplanes owned or rented at the end of the quarter. The data shown for foreign scheduled carriers are intended to refer to aircraft which at end of the quarter were used in service to and from continental United States. The designation of type of aircraft was that reported by carrier; in some cases more, rather than model number, was given.

[3] Data refer to express and/or freight carried between continental United States and other areas. In the case of the foreign scheduled carriers shown under trans-Atlantic service, and also in footnote, Statistics for United States certificated carriers include both scheduled and nonscheduled operations; and those for United States uncertificated irregular air carriers cover both operations under "lease of equipment" and not under "lease of equipment."

[4] This tonnage is unusually large for the company and reflects traffic diverted to the airline as a result of the Berlin blockade. Approximately 95 percent of this third-quarter tonnage was loaded at Berlin and Frankfurt, Germany. In contrast with the third quarter, total tonnage carried by the company in the first quarter of 1948 was 146 and ton-mileage 104,735, suggesting that the bulk of the traffic normally is long-haul trans-Atlantic traffic rather than movements between points in a foreign country. In the first quarter, only approximately 35 percent of the total tonnage was loaded at Berlin and Frankfurt.

[5] Not available.

[6] Transocean reported a total of 202 tons carried during the quarter ended Aug. 31. This was divided between trans-Atlantic and trans-Pacific services on the basis of data supplied by the company to the Transportation Division. The latter two figures are estimates.

[7] Northwest reported a total of 121 tons carried on its Route PAM-58, over which service is provided to the Orient via Alaska. That portion which moved only between the States and Alaska was estimated by applying the ratio of U. S.-Alaska traffic to total traffic over PAM-58 during July 1948 to the total traffic moved PAM-58 during the entire third quarter. U. S.-Alaska traffic for August and September was unavailable.

[8] The figure is approximate, referring to tons captained instead of tons carried.

[9] Equipment included in that reported above under trans-Pacific service.

[10] This figure is 12 tons higher than the total traffic between continental U. S. and Alaska shown in a previous table, the explanation being that this figure embraces all the Alaska operations of the company's Pacific-Alaska Division, rather than only the U. S.-Alaska operations.

[11] This carrier holds a CAB certificate for operations within Alaska, but conducts its U. S.-Alaska service on a noncertificated, nonscheduled basis. In addition to the 5 DC-4 and 6 C-46 aircraft shown, the company reported in the latter part of 1948 that it had 4 DC-3 planes and 10 "bush aircraft" of several types. The exact number of planes participating in the U. S.-Alaska service is not specified.

[12] A relatively small, but indeterminate, portion of the combined traffic of these 8 carriers was traffic other than that between continental U. S. and other areas.

[13] Equipment included in that reported above under trans-Atlantic service.

[14] Data for the following additional foreign scheduled carriers (three with operating permits from CAB) were unobtainable: Aerovias Brasil; Aerovias Nacionales de Colombia, S. A.; Aerovias Q. S. A.; British South American Airways; Cia. Cubana de Aviacion, S. A.; Empresa Aerea Inter-Americana, S. A.; Linea Aerea Nacional Venezolana; Peruvian International Airways; and Transportes Aereos Centro Americanos, S. A. It will be noted below, however, that footnote [6] that the nonscheduled operations of two of the above airlines are reported.

[15] This term is used to designate customer carrier (nonscheduled) flights of foreign civil aircraft to and from the United States. Two of the eight carriers shown also conduct scheduled operations under permit from CAB.

Sources: U. S. certificated carriers—monthly reports (Form 41) to Civil Aeronautics Board; U. S. uncertificated carriers—quarterly statistical reports to the CAB and data obtained by the Transportation Division from the carriers; Foreign scheduled carriers—data obtained by the Transportation Division; Foreign nonscheduled carriers—operations reports received from carriers by Civil Aeronautics Administration; Alaska Airlines—data submitted to CAB Docket No. 1008, U. S.-Alaska Service Case.

Two additional statistics of value are tonnage carried and average length of haul per ton carried. These statistics are shown in table 28 for the carriers included in table 27.

Wide variations are apparent in the average length of haul per ton of cargo carried by international and overseas American-flag airlines, ranging from approximately 250 miles in the case of National Airlines to nearly 4,000 miles for TWA during 1948. Of particular interest is the fact that the volume of relatively short-haul traffic is large enough to reduce the over-all average for all routes to 1,509 miles, a much shorter distance than the length of a trans-ocean trip.

b. Distribution and directional flow

With respect to the distribution of the overseas cargo traffic of United States certificated carriers, existing data do not permit a detailed presentation of the originations and terminations of such traffic. At the request of the Transportation Division, Pan American Airways in November, 1948, made an estimate of tonnage carried during the third quarter of 1948 (See Page 34).

This estimated distribution throws light on the traffic pattern of the carrier and on the directional flow of cargo. It appears, however, to understate considerably the total volume of traffic, even after allowing for traffic carried within foreign countries, and to omit certain route segments. As reported in table 23, Pan American carried tonnages, by Division, as follows:

Pan American	*Tons*
Atlantic Division	704
Pacific-Alaska Division	
Pacific operations	300
Pacific-Alaska Division	
Alaska operations	756
Latin American Division	3,343
Total	5,103

The above distribution, together with table 27, does show, however, that Latin America (including Mexico, Central America and the Caribbean nations) is the leading area in United States foreign trade by air; and that, in general, air cargo movements are much heavier out-bound from the United States than in-bound to the United States. The unbalanced relation of United States air exports to United States air imports was observed in a preceding section on total United States foreign trade by air.

In 1944, Pan American Airways estimated that a total of 29 million pounds of cargo would be carried in Latin American operations during an unspecified postwar year, divided as follows:

	million pounds
United States to Latin America	16
Latin America to United States	4
Intercountry traffic in Latin America	9

The southbound traffic of 16 million pounds was allocated to gateways and routed on the basis of the 1941 traffic pattern in order to show an origin-destination distribution, but it is believed that the projected distribution is sufficiently unlike the present-day pattern to be of little value here. However, it may be mentioned that 10 areas—Brazil, Mexico, Argentina, Puerto Rico, Colombia, Peru, Cuba, Chile, Ecuador, and Venezuela, in that order—were expected to account for approximately three-fourths of the south-bound traffic, in terms of pounds. Twenty-four other areas were specifically mentioned as destinations for air cargo—Antigua, Bahamas, Bolivia, British Guiana, Canal Zone, Costa Rica, Curacao, Dominican Republic, French Guiana, Guadaloupe, Guatemala, Haiti, Honduras, Jamaica, Martinique, Netherlands Guiana, Nicaragua, Panama, Paraguay, St. Lucia, St. Thomas, Salvador, Trinidad, and Uruguay.

While corresponding data on areas of origin for north-bound traffic were not included in the exhibit submitted to CAB, a breakdown of the projected intercountry traffic (outside continental United States) was given by the company. That breakdown is summarized in the table under table 26.

TABLE 26.—*United States Air Carrier Aircraft in Scheduled Operation, Apr. 30, 1949*[1]

Type of aircraft	Number listed on domestic certificates only	Number listed on foreign certificates only	Number listed on both certificates	Total, aircraft in domestic and international service[2]
Douglas:				
DC-4	32	5	69	101
DC-4	74	66	79	283
DC-3	279	64	19	481
Lockheed:				
649	13	0	0	13
749	2	13	0	15
49	23	21	0	44
18	15	0	6	13
18A	6	0	2	8
Martin 202	0	0	24	24
Boeing:				
307	5	0	0	5
377	0	0	6	6
Convair 240	18	20	72	110
Miscellaneous:				
SR10	7	0	0	7
D18C	4	0	0	4
641	5	0	0	5
C-46	0	0	2	2
All types	503	202	285	1,060

[1] The data pertaining to domestic certificates include both trunk and feeder airlines, and the data pertaining to foreign certificates include not only "international and overseas American flag carriers" but also the following: Alaska Airlines; Caribbean-Atlantic Airlines; Hawaiian Airlines; Northern Consolidated Airlines; and Pacific Northern Airlines. If a comparison is to be made between domestic trunk lines and "international and overseas American flag carriers," a total of 88 aircraft should be deducted from the figure 503 in the above table, and a total of 24 from the figure of 202.

[2] The totals are in some cases incomplete, since aircraft used in scheduled all-cargo service may be omitted. Under a special Civil Air Regulation, scheduled air carriers of cargo are temporarily authorized to engage in cargo-only service under Part 42 of the Civil Air Regulations (until August 1, 1949). Part 42 is applicable to irregular air carriers. Hence, for example, the C-46 aircraft used in all-cargo services by Pan American Airways (see table 24) are not included in the above table, which pertains only to operations under those parts of the Civil Air Regulations pertaining to scheduled services.

Source: Scheduled Air Carrier Maintenance Division, Civil Aeronautics Administration, United States Air Carrier Aircraft in Scheduled Operation, April, 1949, released May 17, 1949.

Intercountry Traffic, Both Directions, in Pounds

Country of origin	*Traffic*	*Major areas of destination*
Argentina	2,095,930	Uruguay, Paraguay, Brazil.
Brazil	692,240	Argentina, Colombia, Mexico.
Cuba	523,740	Mexico, Argentina, Puerto Rico.
Mexico	1,296,280	Cuba, Central America, Argentina.
Paraguay	551,050	Argentina, Uruguay.
Uruguay	1,208,810	Argentina.
All others	2,631,950	
Total	9,000,000	

A final pertinent type of data supplied by Pan American Airways in 1944 concerns the origin and destination, by State, of international air express shipments in 1941. Briefly, it was found that on shipments from continental United States to other points, 47 States and the District of Columbia were represented; while shipments from outside continental United States terminated in each of the 48 States and the District of Columbia. The leading States in originating international air express, in terms of poundage shipped, were New York, Illinois, California, Florida, Texas and New Jersey, in that order. The State of New York also led in terminations of international air express, with California, Texas, District of Columbia, New Jersey and Florida following in order.

Station-to-station airline traffic surveys conducted semiannually by the CAB (covering March and September) reveal facts concerning the directional flow of air cargo carried by certificated airlines, but, since they do not show traffic origins and destinations, they cannot be used as indicators of the over-all pattern of traffic. Space does not permit showing the complete array of station-to-station movements of cargo for any given period, but table 29 (next month) indicates the average daily express and/or freight carried between stations in the scheduled overseas all-cargo services of United States certificated carriers during September, 1948. (Limitations of space have prevented the inclusion of tables 27 through 29 in this issue. They will appear in Part X.)

(Continued Next Month)

Area	*Tonnage carried to:*	*Tonnage carried from:*
Europe	80	55
Near East and Asia	60	30
Africa	20	5
Bermuda	15	2
Cuba	229	23
Puerto Rico	230	25
Mexico	50	15
North Coast of South America	611	46
Central America	42	5
East coast of South America	392	40
West coast of South America	200	21
Total	1,929	267

MR. SHIPPER

[illegible] Mr. A. Tee, air-minded shipper, have you ever considered

CARGO INSURANCE COSTS

[illegible] Insurance [illegible] shipping your freight by air [illegible] and there's no increase charge for it.

Mr. Shipper, you don't have to pack all of your shipments with [illegible]. Your equipment is in the custody of the carrier at the shortest time, and that makes a big difference to the insurance company . . . a big difference in your favor.

Then, too, air shipping does away with costly unexpected pilferage, where packages are removed by a surprisingly higher rate of pilferage.

Damage, [illegible] . . . the closer a shipment stays to the ground, the greater is the chance for theft.

Says Mr. A. Tee, air-minded consignor:

LOOK FOR THE HIDDEN SAVINGS IN AIR CARGO!

ALONG THE WAY... OF TWA

"I'M SHIPPING IT BY TWA ...HOW ELSE ?"

EXPERIENCED SHIPPERS KNOW THEY CAN RELY ON **TWA** AIR CARGO TO GET SHIPMENTS (LARGE OR SMALL) TO DESTINATIONS QUICKLY, SAFELY, ECONOMICALLY. IT'S THE IDEAL WAY TO SEND YOUR CHRISTMAS GIFTS OVERSEAS. RATES ARE AMAZINGLY LOW.

GREEK GOAT...GIFT TO UNCLE SAM

RARE ANIMAL SHIPPED BY **TWA** AIR CARGO WITH THANKS OF GREEK PEOPLE FOR ECONOMIC AID. YOU CAN SHIP PRACTICALLY ANYTHING ALMOST ANYWHERE THIS LOW-COST WAY. GET RATES NOW.

SHIPMENT GOT THERE ... NICE TO KNOW

CONFIRMATION OF DELIVERY ... AN ADDED **TWA** SERVICE. ALL YOU DO IS CALL **TWA** OFFICE FOR THIS INFORMATION A FEW DAYS AFTER SHIPMENT DEPARTS.

STUDY THE MAP. NOTE TWA DIRECT ROUTES SERVING U.S.A., LONDON, FRANKFURT, PARIS, ZURICH, GENEVA, ROME, ISRAEL, OTHER EUROPEAN AND MIDDLE-EAST POINTS.

REACH FOR THE PHONE

It's so easy on that to start your shipments via TWA Air Cargo. All-Cargo TWA flights to and from U.S.A. every weekend ... secure first of week departure ... save time, money, work ... call TWA or your own freight forwarder.

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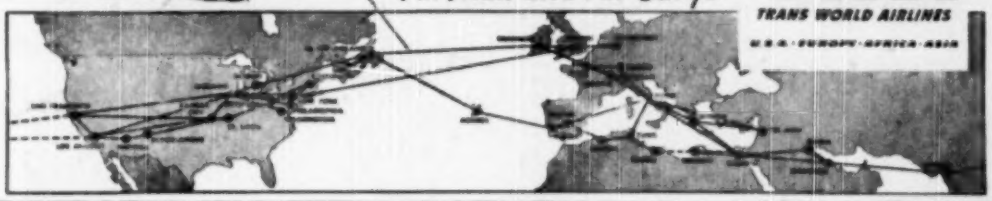
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